A Clinical Lecture
ON
TRIPLE PERICARDIAL FRICTION-SOUND, AND ON REDUPLICATION OF THE FIRST SOUND OF THE HEART.

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GENTLEMEN,—This being my first lecture as special Professor of Clinical Medicine, I wish to state very briefly my reason for having resigned the chair of Medicine which I have held for the last thirteen years. For some time past, but especially during the last two years, the increase of my professional engagements has rendered it very difficult for me to give my lectures on the Principles and Practice of Medicine with the requisite regularity. I therefore felt it to be my duty, both to you and to the Council of the College, to resign my professorship.

The Council in accepting my resignation have elected me, as I am informed, by a unanimous resolution to be Professor of Clinical Medicine, with the same appointment at the hospital as I before held.

Now let me say that one result of my reluctant resignation of the Professorship of Medicine will be that I shall have more time to devote to the important subject of clinical teaching, and that I shall soon be enabled to act upon a suggestion which has often been made to me by some of my past and present pupils, to publish in a collected form those of my lectures on the Principles and Practice of Medicine which I look upon as most likely to be of service to you and to other students of medicine.

One more remark and I have done with these personal explanations. I have often been asked why I resigned the office of Examiner in Medicine to which the Council of the Royal College of Surgeons of England lately did me the honour to appoint me. The explanation is very simple. I am in the midst of my year of office as Senior Censor of the Royal College of Physicians, and most of the examinations being held simultaneously at the two Colleges, I found it impossible to discharge at the same time the duties of Censor at the College of Physicians and Examiner at the College of Surgeons. I therefore had no alternative but to resign the office to which I had been last appointed.

Now let me direct your attention to some matters of more than ordinary clinical interest and importance.

Most of you here will remember that in my lectures on the Principles and Practice of Medicine I have been in the habit of teaching that the friction-sound of pericarditis is, in most instances, not merely to-and fro—systolic and diastolic—but that a third sound often intervenes somewhere between the other two. I say "somewhere" because until quite recently I did not know at what period of the heart's revolution the third friction-sound occurred. During the last few months I have gradually worked out what I believe to be the true interpretation of the triple pericardial friction-sound, and I purpose now to explain to you the successive steps by which I have arrived at this result.

I got the first hint towards a solution of the problem from a very interesting and suggestive clinical lecture published by the late Dr. Hyde Salter.* In that lecture Dr. Salter describes first a case of rheumatic pericarditis, in which a friction-sound double over mid-sternum became triple over the right third intercostal space close to the sternum, and as this triple character of the friction-sound was most marked when the stethoscope was placed directly over the right auricle, Dr. Salter said: "I feel no doubt that the third element of the sound, on passing from the surface of the ventricle to that of the auricle, is due to auricular pericardial friction."

Dr. Salter next relates a case of renal pericarditis in which a single friction-sound of distinctly presystolic rhythm was heard over the third costal cartilage about an inch to the left of the sternum, and the patient dying a few days afterwards, the left auricle was found covered and roughened with lymph. "The roughening was confined to the surface of the auricle, and therefore," Dr. Salter remarks, "the friction-sound coincided with the movements of the auricle."

In a third case, which was also one of uræmic pericarditis, Dr. Salter heard a to-and-fro friction-sound over a spot not larger than a shilling in the intercostal space, close to the right edge of the sternum. The first and louder sound was presystolic, the second systolic in rhythm; and, as the diastole of the auricle coincided in time with the systole of the ventricle, Dr. Salter inferred that this double sound, limited to the region of the right auricle, was caused by the systole and diastole of an auricle roughened by lymph. A day or two after the occurrence of the auricular friction the sound spread down over the ventricles, and became general, and a day or two after that the patient died. At the post-mortem examination the pericardium was found to be the seat of recent general inflammation, and was everywhere roughened with soft lymph. Lastly, Dr. Salter refers briefly to a case in which a circumscribed friction-sound was heard over the third right interspace close to the sternum; the sound was to-and-fro, and the first and loudest of its two elements was sharply presystolic in time.

Not long after the publication of Dr. Salter's lecture, the following case came under my own observation.

John E——, aged fifty-five, was admitted into Craven ward on October 27th, 1873. He had been a wine porter at the London Docks; he had drunk freely, and at the time of his admission he was suffering from the symptoms of contracted granular kidney in an advanced stage. At my visit soon after his admission I noted that a presystolic exocardial friction-sound was heard most distinctly between the left nipple and the sternum, and as it was obviously synchronous with the auricular systole, I remarked that in all probability the sound was caused by the friction of one auricle having its surface roughened by lymph. On the 30th of October, in addition to the presystolic sound before noted, there was a systolic friction-sound heard most distinctly at the heart's apex, slightly to the left of the mammary line. I then expressed my belief that, in addition to the roughening of the auricle by lymph, there was probably a patch of lymph near the apex of the ventricle. On the 6th of November the presystolic friction at the base had ceased to be audible, while the systolic sound at the apex was still heard. On the 1st of December the systolic friction was still heard at the apex, but on Dec. 8th it had become less distinct, and an endocardial systolic blowing-sound was heard at the apex. At subsequent visits it was noted that the systolic sound at the apex had lost its friction character, and assumed the character of a regurgitant mitral murmur. This continued until the patient's death on Jan. 3rd. We found, as I had anticipated, that the right auricle and the apex of the right and left ventricle were covered each by a patch of lymph, the surface of which having become smoothed down by friction accounted for the cessation of the friction-sounds which had been present when the surfaces were roughened by recent exudation. The margins of the mitral valve were thickened by lymph, and thus the regurgitant mitral murmur was explained.

And now, having learnt, not only by the study of Dr. Salter's recorded cases, but by the observation of this one case under my own care, that an auricle roughened by lymph may cause a friction-sound of presystolic rhythm, I soon saw that in this sonorous influence of the contracting auricle was to be found the interpretation of the triple friction-sound of pericarditis, with which I had long been familiar as a clinical fact, although I had not hitherto been able to explain it.

Dr. Salter, in his concluding remarks, says: "Triple friction, as far as I know, is a new thing, or rather, I should say, an undescribed thing, for no doubt it is as old as pericarditis itself." This remark is not quite correct, for Dr. Stokes refers to a case of pericarditis in which he observed a triple friction-sound.* But although Dr. Salter was not the first to describe a triple pericardial friction-sound, he was, so far as I know, the first to explain it. He evidently, however, looked upon the triple sound as a rare and ex-

* THE LANCET, July 29th, 1871, p. 151.

* Diseases of the Heart and Aorta, pp. 29-30.

ceptional phenomenon, whereas it is, in fact, the usual result and indication of pericarditis affecting the general surface of the heart.

During the past winter session I have had under my care in the hospital seven cases of acute pericarditis, four rheumatic, two uræmic, and one the result of exposure to cold; and in four out of these seven cases most of you had the opportunity of observing that when the disease was at its height a triple friction-sound was distinctly audible over the heart, the triple character of the sound being most distinct near the base of the heart at the junction of the auricles and ventricles. In the two uræmic cases, there being advanced granular contraction of the kidney, the disease was fatal, and the whole surface of both auricles and ventricles was found roughened by recent lymph. In the three cases with a friction-sound not triple, but only to-and-fro, the disease assumed a milder character, having apparently been cut short by the early application of leeches. I have said that the friction-sound resulting from a severe and general pericarditis is triple—*rub-a-rub*,—reminding one, as Dr. Salter says, of the triple sound of a canter. The first two divisions of the triple sound occur in quick succession, the third after a rather longer interval; then follows a pause, and again occurs the *rub-a-rub*. Now, if while you are listening to this triple sound you place your finger over the heart's apex or over one carotid, and at the same time bear in mind what you may have seen of the rhythmical contractions of the exposed heart of a living or recently dead animal, you will readily perceive that the first element of the triple sound is auricular systolic, the second ventricular systolic, and the third ventricular diastolic, while the silent interval which follows coincides in time with the post-diastolic pause. The relation of the triple sound with the heart's movements and rhythm may be represented as follows:—

Rub	Auricular systole
a	Ventricular systole
Rub	Ventricular diastole

Rub	Auricular systole
a	Ventricular systole
Rub	Ventricular diastole

A to-and-fro friction-sound might be caused by lymph on the surface of one auricle alone, as happened probably in Dr. Salter's third and fourth cases. When both the auricle and the ventricle are roughened, the second auricular friction-sound (auricular diastolic) would of course be blended with the ventricular systolic, the diastole of the auricle and the systole of the ventricle being coincident. A friction-sound at the commencement of pericarditis is usually single and systolic, but it may quickly become double and triple. On the other hand, when the disease is subsiding, the first sound to cease is usually the auricular systolic, then the ventricular diastolic. A single systolic bruit may remain for many days, and even for weeks, after the active symptoms have passed away.

The cessation of the friction-sounds after an attack of acute pericarditis is due, in a large proportion of cases, not to adhesion of the two layers of pericardium, but to the smoothing down and polishing of the previously roughened surface of the serous membrane. So long as the pericardial surface is roughened, the first sound may be associated with a sound of a superficial brushing character, which an inexperienced or careless auscultator may readily mistake for an endocardial mitral murmur. The diagnosis may be aided by observing that the exocardial sound is often much increased, and sometimes made to-and-fro, by making firm pressure with the stethoscope over the spot where it is most distinctly heard. The exocardial sound, too, is often heard most distinctly, not at the apex, where a regurgitant mitral murmur is most audible, but some distance above the apex over the body of the ventricle, and it is rarely heard at the back of the chest.

I now proceed to the consideration of another interesting phenomenon of cardiac auscultation to which attention has been of late especially directed—I mean the so-called *reduplication of the first sound*, which is often associated with Bright's disease, both acute and chronic, and which is also heard in connexion with other morbid states to which I shall presently refer. Dr. Sibson has devoted much time and labour to the investigation of the reduplication of the first sound in connexion with Bright's disease. In many cases of Bright's disease it is admitted by all pathologists who have given their attention to the subject, that there is an increase of systemic arterial tension consequent on the impeded passage of the impure blood through the terminal vessels. The contraction of the muscular arterioles throughout the systemic circulation is, without doubt, the cause of this impediment and of the resulting arterial tension, and the doubling of the first sound is in some direct way associated with the increased arterial tension. Dr. Sibson explains the reduplicate first sound by saying that the left ventricle, owing to the resistance offered by the tight arteries to the expulsion of its contents, continues its contraction later than the right, which has expelled its blood into the pulmonary artery with comparative ease. The shock of the first sound is heard at the end of the contraction of the ventricle. Hence, in consequence of the left ventricle contracting more tardily than the right, there is a doubling of the first sound.* Dr. Sibson admits that there is a difficulty in reconciling this explanation of the double first sound with the absence of doubling of the second sound in the same cases, and he meets the difficulty with the following statement:—"In these cases the systemic arteries are always in a state of great tension. When the blood ceases to be sent into the tight aorta, the instant contraction of the walls of the arteries sends the blood back upon the aortic walls and valve. The pulmonary arteries at the commencement of the systole are comparatively flaccid, but become tense at the end of it. The walls of the pulmonary artery begin to contract and send back a return wave upon the trunk of the artery; but as these walls are not always in a state of tension they take a longer time to contract than those of the aorta and its branches. Owing, therefore, to the slowness of the pulmonary, and the quickness of the aortic, contraction, the latter, which is already heavily handicapped, makes up in speed what it loses in time, and the two systems of arteries deliver their backstroke at the same instant." Now, it appears to me that this explanation, while it apparently removes one difficulty, raises another of a very formidable character. If the greater tension of the aorta in the cases under consideration enables it to overtake the earlier but less forcibly contracting pulmonary artery, then it is obvious that in the normal condition, the aorta and the pulmonary artery commencing their contractions at the same instant, the much greater tension of the aorta should react upon and close its valves before those of the more feebly contracting pulmonary artery are closed, and the result should be reduplication of the second sound as a constant and normal condition.

Again, I have in numberless instances demonstrated to you in the wards an analogous doubling of the first sound in cases of advanced general emphysema of the lung, with resulting fulness and hypertrophy of the right ventricle. Here the increased tension of the pulmonary artery consequent on the impeded circulation through the lungs can rarely, if ever, equal the normal tension of the aorta. If then, in accordance with Dr. Sibson's theory, the right ventricle completes its contraction later than the left, and so causes the reduplication of the first sound, the closure of the pulmonary valves must inevitably be effected later than that of the aortic valves, and the second sound would also be doubled. The reverse, however, is the case. The second sound, although accentuated over the pulmonary valves, remains single, while the first is distinctly reduplicated. A want of synchronism in either the commencement or the completion of the ventricular contraction must, in my opinion, be a very rare phenomenon. The interlacing of the muscular fibres of the two ventricles, their passing over from one side to the other, appears to render the synchronous contraction of the ventricles a physical necessity; and in watching the exposed heart of an animal in the different stages of apnœa, first in the stage of systemic obstruction with distension of the left cavities, and later during the period of pulmonary obstruction, with great distension of the right cavities and comparative emptiness of the left, I have been struck by the uninterrupted exact synchronism of the contractions on the two sides. A con-

* Lumleian Lectures, THE LANCET, March 28th and April 11th, 1874.

sideration of these difficulties in the way of accepting Dr. Sibson's theory of reduplication of the first sound in association with Bright's disease led me to seek for another explanation of the phenomena, and I now venture to suggest that the true explanation is to be found in the fact that *the contraction of a dilated, and especially of an hypertrophied, auricle becomes sonorous, and that the first division of the double first sound in the cases under consideration is the result of the auricular systole.*

I believe that this explanation of reduplication of the first sound will be found consistent with all the ascertained facts. In the first place, it will be observed that the rhythm of the sound in cases of well-marked reduplication is precisely the same as that of the triple friction-sound before referred to as a result of pericarditis. The triple friction-sound being expressed by *rub-a-rub*, the triple sounds in a case of reduplication may be represented by *rat-a-tat*. The cantering character of the sounds may be imitated by bringing down sharply upon the table in quick succession the ends of three flexed fingers, making the two first taps nearer together than the second and third. The triple friction-sounds are longer and more nearly continuous with each other, but the rhythm is precisely the same in the two classes of cases. The relation of the triple sound to the heart's movements may be represented as follows:—

Rat	Auricular systole
a	Ventricular systole
Tat	Ventricular diastole
Rat	Auricular systole
a	Ventricular systole
Tat	Ventricular diastole

The reduplication of the first sound in cases of Bright's disease is usually most distinctly heard between the mamma and the sternum in the third left interspace—that is, about the line of junction between the auricle and ventricle. The sound may be single or indistinctly double at the apex, while it is decidedly double at the third interspace, and again single over the aorta. The position in which I have stated that the reduplication is best heard accords with Dr. Sibson's account, but our explanations differ essentially. He states that in this position the supposed asynchronous contraction of the two ventricles is heard, while I believe that the contraction of the dilated, tense, and often hypertrophied auricle is there heard immediately before that of the ventricular systole. That the reduplicate first sound is often inaudible at the apex of the heart, where the normal first sound is best heard, is in itself suggestive that some other agency than ventricular contraction is concerned in the causation of the phenomenon. The assumed asynchronism of the ventricular contraction is a theory unsupported by evidence, but the rapidly successive contraction of the auricle and ventricle is an undoubted fact. The question then arises, Does the contraction of the auricle afford a satisfactory explanation of the first element in the reduplicate first sound? It is of course admitted that in the normal state the contraction of the auricle, contrary to Laennec's original theory of the heart's sounds, is inaudible; but we have positive evidence of sound resulting from the auricular systole in two distinct morbid conditions. First, as a result of constriction of the mitral orifice, we have the now well-known presystolic or, as Dr. Gairdner happily designates it, the auricular systolic murmur. In these cases the impediment resulting from the mitral constriction causes a slow auricular contraction with a prolonged presystolic murmur, followed by a short first sound, the result of rapid contraction of the partially filled left ventricle. Second, when the surface of the auricle is roughened by lymph there occurs the presystolic, or, better, the auricular systolic friction-sound. Then, as a result of obstruction in the systemic arteries, and consequent distension of the left auricle, either with or without hypertrophy of its walls, we have, as I believe, an audible auricular systole, constituting the first division of the reduplicate first sound in cases of Bright's disease. The rhythm of this auricular systolic sound is precisely the same as that of the auricular systolic mitral murmur and of the auricular systolic pericardial friction-sound; and this identity of rhythm in the three classes of cases affords to my mind one of the strongest proofs that the first sound in each case is excited by the auricular systole. The triple friction-sound of pericarditis and the triple sound resulting from the doubling of the first sound are alike suggestive of a canter.

In one of my cases of rheumatic pericarditis before mentioned, the friction-sound, which had been distinctly triple, assumed for a time the character of a reduplicate first sound. At the stage to which I refer there was a single systolic brush over the ventricle near the mamma, while over the mid-sternum there was a short presystolic brush, which, being quickly followed by the first sound, bore a close resemblance to a reduplicate first sound. The presystolic brush was probably caused by the systole of the right auricle still slightly roughened with lymph. In a few days more the presystolic sound had ceased, and there remained only the systolic brush over the body of the ventricle.

As I have before remarked, it is sometimes difficult to distinguish the sort of prolongation of the first sound, which is caused by a patch of lymph near the apex of the heart, from a regurgitant mitral murmur. I believe, too, that the forcible friction of an hypertrophied left ventricle in cases of chronic Bright's disease frequently causes an uneven thickening of the pericardium over a circumscribed space (a white spot on the pericardium—a pericardial "corn"), which gives a prolonged and brushing character to the first sound, sometimes not easily distinguishable from a systolic mitral murmur. I have several times diagnosed such a white patch during life, and have found it after death, as some of you here can testify.

I have before stated that the reduplication of the first sound occurs not only in connexion with Bright's disease, but it is almost constantly associated with advanced general emphysema of the lung. I have observed it frequently in elderly persons with degeneration and rigidity of the arterial walls; also very distinctly above and to the right of the left nipple in some cases of mitral regurgitation. There is a good example of this in the case of a girl now in Twining ward. There is one feature which is common to all these cases, and that is an impeded circulation, either pulmonary or systemic. The result of this obstruction acting backwards is to cause distension and by degrees hypertrophy of the walls of one or both auricles. It is obvious that an impediment commencing in the systemic arteries or at the left side of the heart, may by a retrograde action extend through the lungs to the right cavities of the heart.

In some cases of coexisting emphysema of the lungs and chronic Bright's disease both sides of the heart become simultaneously hypertrophied, and the reduplication of the first sound is distinctly heard over an extensive surface. I have quite recently, in private practice, seen several examples of this complication. It is obvious that the theory of asynchronous ventricular contraction is inadequate to the explanation of the reduplication which results from a simultaneous equal, or nearly equal, impediment in the pulmonary and systemic vessels; while the auricular theory explains the phenomena completely.

I have observed distinct reduplication of the first sound over the base of the heart in some cases of simple dilatation of the heart's cavities, without valvular disease or evidence of arterial obstruction, either pulmonary or systemic. Here, again, the facts are inconsistent with the theory of asynchronous ventricular contraction.

That the systole of a distended and hypertrophied auricle may generate sound is in the highest degree probable. There are three influences which, either separately or combined, may cause an audible sound during the auricular systole: First, the sudden muscular tension of the walls of the auricle; secondly, the impulse against the chest wall; and, thirdly, the forcible impact of the blood driven onwards by the auricle against the stationary blood within the ventricle. This last element is similar to that which, according to the theory of Dr. Leared, is the main cause of the normal first sound of the heart—namely, the forcible impact of the blood from the ventricles against the stationary columns of blood in the aorta and pulmonary artery. Of this theory of Dr. Leared, Dr. Walshe says that "it appears more in accordance with the principles of physics, and better reconcilable with numerous facts of clinical experience, than any of its rivals."*

* Diseases of the Heart, 4th Edit., p. 67.

Dr. Charcelay, of Tours, has published a case (*Archives Générales de Médecine*, December, 1838, pp. 406 8) in which a presystolic knocking (*claquement*), heard beneath the right edge of the sternum on a level with the second rib, was found after death to have been caused by an aneurismal dilatation, with thickening of the right auricle; and Dr. Walshe states that "in a case of hypertrophy of the left auricle, a loud presystolic sound of maximum force at the third left cartilage, different absolutely from a reduplicate sound by its special KNOCKING character."* Since, then, an aneurismal and a much hypertrophied auricle have been known to cause a knocking sound of presystolic rhythm, it is in the highest degree probable that an auricle in an intermediate state of dilatation and hypertrophy would generate exactly that amount and kind of sound which we recognise as the first division of the duplex first sound.

I have endeavoured to ascertain whether, by the position in which the double sound is best heard, it is possible to determine which of the two auricles is the cause of the first division of the sound in any given case.

Without doubt, if the auricle is roughened by lymph, the resulting friction-sound will be best heard over the third interspace, to the right or left of the sternum as the right or left auricle is the one affected. I find, too, that in cases of emphysema, with impeded pulmonary circulation, the reduplication is more distinctly heard at the right margin and the lower end of the sternum than to the left; while in cases of renal disease, and cases of senile degeneration of the systemic arterial walls, the sound is best heard between the mamma and the left margin of the sternum—that is, over the space where a distended left auricle would overlap the ventricle. I believe, however, that in consequence of the oblique position of the heart, and the overlapping of the left cavities by the right, the sound which results from contraction of the left auricle, and especially the sound which may be supposed to result from the impact of the blood from the contracting auricle against that contained in the dilated ventricle, will be more or less diffused over the overlapping right ventricle. The left auricular sound therefore is with more difficulty localised and distinguished from the right than the aortic from the pulmonary share of the normal second sound, each of which, as we know, is conducted along the course of the artery in which it originates. It is probable, too, that in consequence of the closer approximation of the right cavities to the chest wall, the amount of obstruction in the pulmonary vessels, which will render the right auricular contraction audible with resulting reduplication of the first sound, is less than the degree of systemic obstruction required to develop the same phenomena on the left side.

In addition to the evidence already adduced in favour of the auriculo-ventricular theory of the double first sound, the following facts appear to me to be of importance:—

1. The doubling of the sound is always more distinctly audible over the body of the heart than at the apex. The reduplication is either lost or indistinctly heard at the apex. Now, since the normal first sound is always best heard at the apex, we should expect to find that if both elements of the double sound were the result of ventricular contraction the double sound would be most distinct also at the apex.

2. The part of the double sound which is lost as we pass from base to apex is always the first or presystolic part. Now in cases of Bright's disease, with obstruction in the systemic arteries, the advocates of the theory of asynchronous contraction of the ventricles might argue that when the stethoscope is placed over the apex of the heart which is formed by the left ventricle, the comparatively feeble sound which results from the earlier contraction of the right ventricle becomes inaudible, and only the single sound of the left ventricle reaches the ear. But, unfortunately for this argument, when, in consequence of emphysema with pulmonary obstruction, the first sound is double near the base of the heart and single at the left apex, it is still the *first* division of the double sound which disappears at the apex; yet if the want of synchronism of the ventricular systole were the cause of the phenomena, the absent sound would be that of the earlier contracting left ventricle over whose apex the stethoscope is applied. The facts, then, are irreconcilable with the theory which assumes that the doubling of the first sound is due to a retarded contraction of one or other ventricle. You will readily understand that the distinctness of the reduplication is much influenced by the rapidity of the heart's action. The first sound, which is distinctly double when the heart's action is slow, may lose the reduplication when, in consequence of increased rapidity of the heart's contraction, the sounds of the auricular and the ventricular systole become blended together into one sound, which may then have a somewhat prolonged and brushing character, such as an inexperienced and unskilful auscultator might mistake for the murmur of valvular disease.

Dr. Hayden, in his recently published elaborate and valuable work "On Diseases of the Heart and Aorta," expresses the opinion that reduplication of the first sound "is due to resolution of the first sound into its two normal elements—namely, the cardiac impulse, and the sudden tension of the auriculo-ventricular valves." He believes that "cardiac impulse coincides with the initial portion of the ventricular systole, whilst tension of the auriculo-ventricular valves and attached chordæ tendineæ occurs at the conclusion or acme of the systole." Under ordinary circumstances the two elements are virtually simultaneous, not so, he thinks, when the contraction of an hypertrophied ventricle is retarded. In that case the initial portion of the first sound is dull, because due to the stroke of the apex only; whilst the concluding portion is sharp and clear because no longer masked by the dull element of impulse (p. 164). I am bound to say that this description of the relative dulness and clearness of the two elements of the reduplicate first sound does not accord with my experience; and the fact that, as a rule, the reduplication of the first sound is most distinctly heard some way above the heart's apex appears to be inconsistent with Dr. Hayden's theory. It is scarcely necessary to remark that all the evidence which I have adduced in support of my own explanation of the phenomena of reduplication is *pro tanto* adverse to the acceptance of any other theory.

Some of you may perhaps be inclined to ask whether any practical gain is to be expected from the minute observation and analysis of the heart's sounds upon which I have been dwelling in this lecture. In reply to such an inquiry I would remark, first, that the careful study of physical signs is a very wholesome educational discipline for the student and practitioner of medicine. All observations of natural phenomena, to be of value either for the extension of scientific knowledge or for practical guidance, must be precise and accurate. No one familiar with the subject would question the proposition that the study of physical signs has served not only to correct many erroneous notions which had long prevailed with regard to the general or functional symptoms of pulmonary and cardiac diseases, but that it has also much facilitated and improved the treatment of many of those maladies. Then just in proportion to the confidence with which you have learnt to rely upon physical signs in aid of diagnosis and prognosis is the necessity for accuracy of observation and interpretation. If you mistake the soft systolic murmur of anæmia for organic obstruction at the aortic orifice, you not only are wrong in your diagnosis but you base upon that error an unfavourable prognosis, and perhaps neglect to adopt the chalybeate and restorative treatment which would at once remove the anæmia and the murmur to which it gave rise. Again, if you mistake a presystolic friction-sound for the presystolic murmur of mitral stenosis, or a systolic friction-sound for the murmur of mitral incompetence, you confound what may be only a transient and harmless roughening of the surface of the pericardium with the most formidable of the organic valvular lesions; and you cause an incalculable amount of alarm and anxiety by a prognosis deduced from an erroneous observation. I scarcely need remind you that the only way to avoid these errors of observation and interpretation is by constant and careful clinical study to increase and perfect your diagnostic skill.

The reduplication of the first sound, upon the interpretation of which I have dwelt so long, is not without its practical prognostic significance and value, in so far as it affords undoubted evidence that the impediment to the circulation, whether in the pulmonary or in the systemic system, is acting backwards through the ventricle upon its associated auricle, and is causing some degree of auricular dilatation and hypertrophy; and, on the other hand, the cessation of the reduplication, as, for instance, in some cases of acute and transient Bright's disease, is evidence of the returning freedom of the circulation, and so far it is of favourable

* Diseases of the Heart, 4th Edit., p. 75.

omen. That the contraction of the terminal muscular arterioles excited by blood contamination, the result of renal disease, should act backwards through the systemic arteries upon the left ventricle and auricle so as to cause an appreciable modification of the heart's sounds, and ultimately hypertrophy of the muscular tissue of the propelling heart and of the resisting and regulating arterioles, is an interesting illustration of the correlation of physiological forces. And you will find hereafter, in the daily practice of your profession, that your ability to observe and to interpret some of the more obscure and doubtful phenomena of disease is much favoured by the study which you have bestowed upon minute physical signs such as those which we have now been discussing.

Postscript.—After the preceding lecture had been written, and a few days before it was delivered, my friend and colleague Dr. Curnow directed my attention to a recently-published thesis, entitled "D'un Phénomène Stethoscopique propre à certaines formes d'Hypertrophie simple du Cœur," by Dr. Exchaquet, Interne des Hôpitaux de Paris, 1875. In this publication the author gives the results of observations made in numerous cases by his teacher, M. Potain. These observations have reference to the modification of the heart's sound which Dr. Sibson and others call reduplication of the first sound, but which the French observers designate "bruit de galop." It should be borne in mind that "petit galop" is the French equivalent for the English word "canter." Dr. Exchaquet raises various forcible objections to Dr. Sibson's theory of reduplication, and maintains that the presystolic element of the double first sound is caused by *an abnormally energetic and sudden contraction of the left auricle.* I have been much interested to find that my explanation of the phenomena of reduplication, arrived at quite independently, has been anticipated and confirmed by M. Potain, who points out that when the chest is not thickly covered by fat the presystolic contraction of the auricle may be seen and felt in the third left intercostal space, where in the same cases the bruit de galop is also most distinctly heard. I find, however, that M. Potain looks upon this modification of the heart's sounds as being almost invariably associated with certain forms of albuminuria. As an exaggeration of a normal phenomenon he has observed it to a very slight degree, and as a transient condition, in persons free from organic disease and from functional disorder of any kind; but when the bruit de galop is pronounced and permanent, he believes it to be invariably associated with albuminuria and resulting distension of the left auricle, and he looks upon this acoustic sign as diagnostic of certain forms of albuminuria. One of Dr. Exchaquet's "conclusions" is: "La présence de l'albumine dans l'urine est constamment observée chez les malades qui présentent ce signe"—i.e., the bruit de galop. The author makes no reference to the very frequent association of the bruit de galop, *alias* doubling of the first sound, with emphysema and other conditions resulting in an impeded circulation through the lungs, and consequent distension of the right auricle, but unassociated with albuminuria—a class of cases of very common occurrence to which I have directed attention in my lecture. Dr. Exchaquet discusses the theoretical explanation of the impeded circulation, and the resulting cardiac hypertrophy in cases of Bright's disease, and I have been as much amused as amazed to find him asserting that I adopt and defend Traube's theory, which attributes the cardiac hypertrophy solely to the impeded circulation through the *kidney.* I had supposed myself to have been amongst the first to point out the insufficiency of Traube's theory, and to suggest an explanation of the phenomena more in accordance with anatomical facts and with physiological principles. If Dr. Exchaquet will do me the favour to refer to my little volume of "Lectures on Bright's Disease," he will find that my explanation of the relation between cardiac hypertrophy and Bright's disease, whether true or not, is, at any rate, essentially different from that given by Traube.

ST. ANDREWS GRADUATES' ASSOCIATION.—The anniversary session will be held in the middle of June. The Council have invited the Very Rev. Principal Tulloch, D.D., and Principal Shairp, LL.D., of St. Andrews, to the dinner, when it is hoped that the members will muster in force to meet their distinguished guests.

NOTES ON ASYLUMS FOR THE INSANE IN AMERICA.

BY JOHN CHARLES BUCKNILL, M.D., F.R.S.

(*Continued from p. 686.*)

To return to the subject of asylum plans. The governors of the M'Lean Asylum at Boston have determined to rebuild their excellent institution, crowded out from the environs of the city, on the separate block or pavilion system, and they have recently sent their accomplished architect, Mr. Charles Folsom, to this country to gather information by the inspection of our institutions. I am afraid that in the matter of this particular form of architecture his opportunities of inspection were but meagre. With the exception of Caterham, Leavesden, and the new asylum for Lancashire at Wigan, I do not know that we possess any institutions constructed on this plan, which, however much it may be advocated by medical men who have most experience in the management of establishments for the insane, does not seem to conform with the ideas of display which are native to the minds of architects and their employers. Then something has to be allowed for the appropriateness of climate and locality for special forms of building. The most concentrated asylum I ever visited was that at Genoa, where a mass of lunatics sweltered in a building constructed in the shape of a wheel with many spokes; and the most perfect specimen of a pavilion asylum I have ever seen was the one at Christiania, where the deep snows of a long and severe winter make the separate blocks cold, dreary, and difficult of access. The plan had, without sufficient forethought and allowance, been adopted on foreign recommendation, as the non-restraint system also had been adopted, with the singular modification that the refractory wards were provided with galleries for the safety of the attendants. This was seen by me in 1869, and I trust that since that time further experience has suggested important ameliorations.

The Americans have no central authority of large and general experience, like the Commissioners in Lunacy, to guide them in the formation and management of their asylums; but, in default thereof, they make large use of the special knowledge of their medical officers, and in this manner they attain a high degree of success, as in the plans before mentioned of Dr. Gray and Dr. Nichols.

Each State acting on its own laws and judging of its own requirements in the matter of provision for the treatment of the insane, it can be no occasion for surprise that great divergence of practice exists. Thus the State of New Jersey, having already an asylum at Trenton accommodating 500 insane patients, is now completing the new asylum at Morristown calculated to accommodate 900 lunatics, "the policy of the State being to make ample provision for every insane person in it." In Missouri they have asylum accommodation for 1300 inmates, "leaving 700 or 800 without the instrumentalities enlightened humanity has devised." In Virginia "we have been unable to keep the gaols clear of all males: we hope to have the gaols clear of females soon.....Some 350 or 400 chronic cases are scattered throughout the State at home or in the gaols." In Maryland "the insane population is 750." The State has provided accommodation for 250, and "90 or 100 are scattered between almshouses and county gaols." In North Carolina "we have nearly 1000 insane of both sexes and all colours, with accommodation for about 250 of them, if we can call our crowded condition accommodation"; and so on. I quote from the reports made by the superintendents of the different State asylums to the meeting of American superintendents of the insane at Auburn, the sufficiency of asylum accommodation varying, as it would appear, to a great degree with the wealth and prosperity of the different States. In Ohio, Dr. Gundry stated, 75 per cent. of the general taxation of the State "has been spent in building and supporting the benevolent institutions, in which are included the insane, blind, deaf and dumb, and idiotic." It is abundantly evident, from the reports of these gentlemen, that the people of the country at large, whether they belong to States which are prosperous and wealthy, like New Jersey, or are de-

pressed and impoverished by war and its results, like North Carolina, are alive to the duty of providing sufficient accommodation for their insane, however much in the latter instances performance may lag behind desire.

There is, however, one painful reflection when one hears of the large sums appropriated to this purpose, and the discouraging *remanets* which exist, that the public money is not expended wisely, nor always even honestly. The president of the Association, Dr. Nichols, remarked on this point that one of the conditions which are necessary to secure State provision for the insane was "confidence on the part of the people and their representatives that the money appropriated to establish and maintain institutions for the insane will be economically and honestly expended. The *politicians*, it appears to me, bring such enterprises into disrepute by the drafts they make upon the appropriations for the establishment of institutions for the insane, in the shape of advantageous contracts and sinecure places for their political supporters, by which the cost of such institutions has been greatly enhanced." This I have myself found to be the public feeling. Speaking to an eminent banker in New York of the state in which I had found the city asylums, he replied: "I don't know how it is. They have cost enough, but we never know how the money goes. *There is always a tap leaking somewhere.*"

The law relating to the admission of lunatics into asylums differs somewhat widely in the various States. In New York, formerly, the insane were committed by any judge upon the recommendation of any two physicians, *or persons calling themselves physicians*. The new statutes provide that no physician shall certify for committal to an asylum unless he be a permanent resident of the State, has practised his profession for at least three years, and possesses a diploma from an incorporated medical college. He must also obtain a certificate of qualification from a judge of a Court of Record to whom he is personally known. This law, so much more stringent than our own, will tend to form a class of medical men duly qualified to exercise with knowledge and judgment an important and often difficult social duty. In Mississippi, a law, passed last session, provides that "in the admission of patients the sworn certificate of two physicians, containing a full description and history of the case, shall first be sent to the superintendent, who grants admission to the most deserving." In Illinois also there have been some changes in the laws for admitting patients. All patients are now admitted *on the verdict of six men*, one of whom must be a physician. These are all new laws on the subject passed in the last session of the State Legislatures.

In the immediate neighbourhood of the Borough Asylum at Boston I visited what we should call the Idiot Asylum, but which there enjoys the more descriptive and accurate appellation of the School for Children of Weak Mind. It is under the control of Dr. Howe, of world-wide reputation, who visits it at all hours of the day and almost of the night, and takes a lively interest in it. The building is a wooden one of one storey with a basement, but the rooms are light, airy, and cheerful, and I was forcibly struck by the space, comfort, and convenience of an institution which had paid a very small tax to architects and builders. It is under the immediate superintendence of a matron, with a staff of female teachers. I only saw one male teacher, who instructed and led the boys in their gymnastics, commencing from lessons in simple walking on a plain surface and walking upon a ladder placed horizontally on the floor, and ending in audacious pranks which made me giddy to look at. The children were well fed, well clothed, and in fine health, and they were evidently under the most kind and encouraging treatment. Their mental and physical education appeared to me to be excellent, and the staff of female teachers manifested that enthusiasm in the cultivation of this thin and poor human soil without which it is impossible that it can be made to bear even the smallest fruit.

Another institution of the same kind which I subsequently visited was the Asylum for Imbecile and Idiot Children belonging to the State of New York, situated at Syracuse, and under the superintendence of Dr. Wilbur. This is a good substantial building, with a farm attached, in which the robust boys do a considerable amount of work, which is not only of financial service to the asylum, but affords a most valuable means of training the children to useful work. The painstaking management of the institution and the skilful treatment and education of the inmates appear to be very similar to those practised at Boston and in our own best asylums.

They have an admirable institution for the blind at Boston, also under Dr. Howe's superintendence, which I visited for the sake of seeing, in Laura Bridgeman, the greatest triumph of patient skill that has ever been attained, in the education, or rather the development, of a human mind which nature has left in default of its instruments. The history of this most interesting woman, and the system of culture by which, with inexhaustible patience, she was rescued from the dark night of sensationless life, has been written by Dr. Howe himself in his last report, and may be found by English readers in the number for January last of the *Journal of Mental Science*. When two years old she lost her senses by scarlet fever; and when found by Dr. Howe at six years of age she was totally blind and deaf, and had only a very indistinct sense of smell. She is now an amiable and cheerful woman, with a bright expression of varying intelligence in her pleasing features, and capable of enjoying life by ready intercourse with all who know her language, and with others through them as interpreters. She even speaks a few words vocally and plainly, as "doctor," "money," &c.; but the rapidity of her finger talk (which is not that visible sign language in common use with deaf mutes, but the contact of finger-points on the palms and fingers, which is felt, not seen), and the amount of her knowledge, not only of realities, but even of generalised and notional knowledge, are truly astonishing. She started conversation with me by asking questions about Victoria, avoiding the word Queen. Was she a good woman? Was she not very extravagant? Was it really true that she kept forty horses? That must be extravagant; &c. &c. She was greatly interested about the "woman" Victoria, and what I told her about the Queen's simple mode of life outside State requirements. I was told that Dr. Howe had purposely abstained from any attempt to impart to her religious notions until he thought her mind had become mature enough to accept them; but that, during his absence in Europe, she began, of her own accord, to make inquiries on the subject, and that she rapidly acquired not only general religious notions, but even possessed herself of the knowledge of the shades of belief which serve to divide and distinguish the different sects of Christians at Boston, and decided for herself which of them was most acceptable to her own mind, and has stuck to her choice. It would seem that in the brain of a New England Puritan the tendency to form religious ideas was an hereditary function which could not be suppressed, though, in early infancy—to widen Milton's words,—"Knowledge at two entrances was quite shut out." Laura can read rapidly and write well. She wrote on a slip of paper for me, in quaint plain characters, "Grace be with you. Laura Bridgeman." Also she can sew, knit, and braid; occupy herself in simple housework—sweeping floors, dusting furniture, making beds; and, in Dr. Howe's words, "in all these things she succeeded so well that she is now capable of earning a livelihood as assistant to any kind and intelligent housekeeper who would accommodate herself to Laura's ways." Altogether, this poor blind and deaf mute is one of the most cultivated of human beings.

Another individual, interesting to the psychologist, whom I saw at Boston was the boy murderer, Jesse Pomeroy. Alas that science should have to couple in one common interest beings so unlike as this personification of cruelty—whether he be sane or insane—with the gentle, affectionate, and suffering woman whom I have just described! the depraved with the deprived. The Governor of the State asked me to see and examine the boy, although I told him that I should not like, as a foreigner, to express an opinion which might influence the course of justice. Therefore, in company with Dr. E. H. Clarke, one of those cultivated and sound-thinking men who in America give so high a tone to the profession which they adorn and lead, I went to the gaol, and there thoroughly examined the condemned criminal for nearly an hour. Dr. Clarke and I quite agreed in the opinion we formed as the result of this examination, which opinion it may well be that he, as a citizen of the State, has been called upon to communicate to the Governor, with whom rests the duty of execution or the prerogative of mercy. A curious law exists in Massachusetts, that no criminal shall suffer execution until a year has passed after

his condemnation; and the Chief-Justice assured me that the principal reason of this law was to provide against the possibility of new evidence turning up which might tell in the condemned man's favour. That, no doubt, would be the reason which would tell most forcibly on the mind of a lawyer; but I think there may be other reasons which might lead our legislators to consider whether an extension of time between condemnation and execution would not be logical and useful in our own country. The first of these is, that it would provide an opportunity for real preparation by change of disposition; but on this I shall not dwell, as it belongs to religious and moral elements of thought. Another reason, which will seem weighty to psychologists, is, that the Massachusetts law gives time for the thorough investigation of the criminal's state of mind, and would render it impossible for a man to be hanged who was really of unsound mind, unless, indeed, he were hanged as a man of unsound mind, which was avowedly done by Baron Bramwell in the case of Dove. I do not know whether immediate or deferred execution would be the greater punishment to the sufferer. This would probably vary with different temperaments and states of mind. An imaginative coward would suffer immensely by the prolonged expectancy of his doom, while to many another condemned man the prorogation of his final penalty would be esteemed a precious privilege, as affording sufficient opportunity to make real peace between his guilty and affrighted soul and his offended God. As an example to the great majority of evil-doers, it would seem probable that to defer execution would increase its efficacy, for nothing strikes the mind of the criminal classes more forcibly than the slow, cold, impassive authority of the law, and nothing excites their imagination so much as the state of the living man condemned to death. A sudden death has few terrors, or we should have no wars, and dangerous employments would have to be more highly remunerated than they are. Jesse Pomeroy's crime or crimes was the murder of two children by torture, inflicted by numerous stabs with a pocket knife. The first murder was only discovered on the commission of the second after the interval of a year. The effect of these crimes on the public mind was such that the women of Boston in very great numbers signed a petition that the criminal might be executed. This strange public act of the women of perhaps the most highly educated and civilised city in the world was no doubt due to the offended feeling of maternity, the victims having been children.

I cannot quit Boston and its kindly and cultivated folk, who made my visit there so happy and interesting, without bidding it and them a word of affectionate farewell. They love the old country, though they are proud of having taken the first step to break away from it. I was with them when they celebrated the centenary of Lexington, and the remembrance had no bitterness. And if they are proud of the past they may well be so of the present, for in that day I mixed with the great crowd of 150,000 New Englanders, the outpouring of the city and the gathering of the country into the villages of Lexington and Concord, and I sought for but did not discover one man the worse for drink. In all that vast crowd, which I may even fairly call a mob, for it was a most disorderly assembly, there were no drunkards nor roughs, and the only policemen to be seen were a few fat, slouching fellows round the President, who could not, however, prevent the mob from stealing his train, so that he had to wait for another. If there had been the average English element of roughs and drunkards such a crowd must have ended in a riot, for the people did just what they pleased without interference. They climbed on and jumped off the roofs of railway trains, clambered in at the car windows, rode on the cow-catchers, surged over the roads and through the processions, and yet all in good temper, and stopping short of any positive mischief. All the day long I saw no quarrel or fight, heard no angry words even; there were no breaches of the people's peace, and the behaviour of this curious crowd was to me the strongest revelation of what sobriety, culture, and self-respect may attain to in the deepest and thickest layers of the population.

As for Boston itself, I wish we could steal the beautiful old city, and float it over to this side, with its cow-path streets, with its schools where every child is compelled to receive a good education whether the priest likes it or not, with its population so greedy of knowledge that they work the free libraries as eagerly as ours would be likely to work free gin-shops; and, above all, with its rich cornice of poets, scholars, and philosophers. Before we unmoored the old place, we should have to drive in from the suburbs Emerson, Longfellow, Eliot, Jarvis and others; but Dr. Wendell Holmes, who is poet, philosopher, and scholar, lives in the heart of the city, literally and metaphorically; he is the raciest of humourists and most genial of citizens.

Note.—With regard to my remarks on the dietetic use of beer in asylums, in THE LANCET of April 21st, I am requested to mention that beer does form a part of the ordinary diet in the South Yorkshire Asylum. It is only in the medical treatment of disease in this asylum that the experiment of abstention from alcoholic stimulus has been made.

(To be continued.)

ON A

SIMPLE MODE OF EXTRACTING CALCULI ARRESTED IN THE URETHRA.

BY J. C. OGILVIE WILL, M.D.,

ASSISTANT-SURGEON TO THE ABERDEEN ROYAL INFIRMARY.

THE extraction of a calculus arrested in the urethra is frequently difficult of execution. The correctness of this proposition will be readily appreciated by anyone who has been called on to perform this operation, and is proved by the number of different instruments suggested for the purpose of attaining the desired end. As the occurrence is sudden, there is, as a rule, no time for a premeditated mode of procedure; and as the symptoms may be, and often are, urgent—as in the case of complete occlusion of the passage and consequent retention of urine, which I have myself met with,—immediate action is necessary. Such cases are met with as frequently (if not more frequently) by the general practitioner as they are by the pure surgeon; and as special surgical assistance is not always at hand, as immediate relief is called for, as the modes hitherto proposed, so far as I know, are possibly ineffective, and require the use of appliances many of them complicated and expensive, and which do not find a place in the armamentaria of those who do not devote special attention to the surgical department of the profession,—I desire to draw attention to a method which can be put in practice by anyone who may be called on to deal with a case of the kind. Moreover, the mode I propose will succeed, as I have myself found, when others fail. Its simplicity and efficiency will be best shown by a short record of a case in which I employed it.

In June, 1874, S. W—— consulted me on account of the difficulty he experienced in passing water. He had observed that his stream was gradually diminishing in size during some months before, but his particular attention was directed to it on the previous day, on finding that he was unable to pass urine when the desire was strong. After a short time, however, he succeeded in getting partial relief, the water running off in driblets, and the act was attended by great pain at one part of the penile portion of the urethra, where he felt that there was something blocking up the passage. On external examination a localised hardness was distinctly perceptible a little in front of the triangular ligament, and a hard body could be readily felt behind a hard cartilaginous ring. After attempting the introduction of larger-sized instruments, I succeeded in passing a No. 5 catheter into the bladder. A grating sensation was communicated to the instrument as it passed the obstacle, and the presence of a calculus arrested by a stricture diagnosed. The diagnosis was easy, the removal of the calculus extremely difficult, for no forceps in my possession would pass through so narrow an obstruction, as the common urethral forceps, and the instruments suggested by Leroy d'Etiolles, Reliquet, and Civiale, are not so constructed as to be of use in such a contingency. I was unwilling to cut down on the calculus, as in all probability a fistulous opening would have been left, which could not have been readily healed; and as

the patient was in a very weakly state of health, internal urethrotomy would not have been advisable. The idea of snaring the calculus by a loop of wire then occurred to me, and I at once determined to give it a trial. Accordingly I passed a loop of tolerably thick silver wire through the stricture behind the calculus, which, after a little manipulation, it caught, but lost its hold more than once; but at length I had the satisfaction of pulling out a thin plate of calcareous matter, much to the delight of the patient, whose expressions of gratitude were unbounded.

In this case a simple loop of wire succeeded when a complicated apparatus, however useful in ordinary cases of bodies arrested within the urethra, could not be used. Though it may appear rather a difficult matter to encircle a urethral calculus with a loop of wire, it is not so, and if we remember that the urethra is not a tube through which any body can be easily pushed along, but a closed valve or long chink, whose sides lie in close contact, the reason of the simplicity of this manœuvre will be readily understood. The difficulty is not in the snaring, but in the retaining of the hold, the loop being apt to slip, especially if the foreign body be a very small one. To overcome this difficulty I have had a slender silver cannula constructed, which is to be used with the wire loop. The latter should first be passed well beyond the calculus, and the cannula slipped over the projecting ends of the wire, and its point brought to bear against the stone, by which it will be steadied, then by making slight traction on the free ends of the wire, the loop will be brought against the calculus, which will thus be securely fixed between the wire and the mouth of the cannula. The ends of the wire may then be twisted round the rings with which the cannula is provided at its proximal extremity, and the apparatus withdrawn. By this mode of procedure, the foreign body being tightly fixed between the loop and the mouth of the tube, it cannot possibly slip out, and its extraction can be accomplished with the greatest ease. Although the cannula I refer to is the most suitable instrument for the purpose, an efficient enough one can be extemporised by cutting a bit out of an old catheter; and in some cases the loop of wire will of itself be all-sufficient, as it was in the case just mentioned, and also in that of a child who had a calculus arrested at the bulb, and where a loop of wire was passed behind it, and slight pressure applied to the perineum to steady it, then by a jerking movement the calculus was brought well within the penile portion of the urethra, and by reapplying the wire and again jerking it was thrown out.

The chief recommendations of the mode I propose are its simplicity and certainty, also its almost universal applicability in cases of arrested urethral calculus, or any similarly shaped body whose extraction is called for. The cannula I possess was constructed for me by Mr. Young, instrument-maker, Edinburgh, and is admirably suited for the purpose.

Aberdeen.

ON THE USE OF THE

HYPOPHOSPHITES OF LIME AND SODA IN PHTHISIS.

BY M. CHARTERIS, M.D.,

PHYSICIAN AND LECTURER ON CLINICAL MEDICINE IN THE GLASGOW ROYAL INFIRMARY.

IN presenting the details of the following cases to the profession, I must premise that I advance no theory as to the mode of action of the drugs employed. I simply desire to record facts. The treatment was adopted sceptically and experimentally, after reading a well-known book on the subject.

The first two cases improved in so marked a manner that one was induced to go on even when they failed in others. My former and present assistants have afforded me valuable aid in obtaining the history of the hospital cases; yet the auscultatory and percussion evidences were in each hospital case ascertained by myself and then entered into the ward journal. One thing was plain to everyone, and that was the power of the hypophosphites of checking the night-sweats, even when all treatment of a curative kind was of little avail. The drugs employed were the Pharmacopœial preparations of the hypophosphites of lime and soda, at first used alone, and afterwards, as will be observed, combined with glycerine. As will be seen, the thermometric indications were carefully recorded. I was not aware until very lately, neither do I find it recorded in the most recent works on the subject, that the temperature varies in the side affected. It would be premature as yet to mention this otherwise than incidentally, but, if confirmed by further observations, its importance as a diagnostic and prognostic is very evident. The side on which there are marked evidences of mischief has a higher temperature, in the axilla, than the side which is free from disease. In some cases this was as high as a degree, in others varying from four to six points. The difference was most apparent in the evenings, when the temperature was higher; but even in the mornings there was a slight distinction. To show that these observations are borne out by post-mortem facts, I may mention that I recently had an opportunity of inspecting the lungs of a man whose temperature indicated for the last four days, in the evening, 102° on the left side, 101° on the right; and three cavities were found in the left, none in the right lung. In the cases at present to be recorded I was not aware of this. The temperature was taken in either axilla.

The first case in which I employed the hypophosphites was that of E. M——, aged thirty-eight. She was admitted into the Royal Infirmary on March 27th, 1875. She stated that she had had a cough every winter, but this attracted little attention until five months ago, when she had what she termed "inflammation of the lungs." This phrase in Scotland has a wide significance, and may mean anything or nothing. What she complained of now was cough, spitting, and shortness of breath. She had not been "poorly" for five months, and she was so weak and exhausted that she could not move about.

On examining her chest, distinct flattening of both apices was observed. In the infraclavicular region of the left side the "cracked-pot" sound was elicited on percussion. There was also dulness in the same region, but not of the same character or extent, on the right side. In other parts of the chest the resonance was normal. On auscultation there was the usual evidence of a cavity in the left infraclavicular region, and tubular respiration in the corresponding part of the right side. The sputum was abundant, filling twice daily the usual hospital vessel for its reception. It was also distinctly nummular. Temperature 101° in the evening, and 98·5° in the morning. Bowels loose; appetite bad. Generally speaking, there was great emaciation; severe cough and profuse perspiration. She was ordered cod-liver oil, but it produced nausea and vomiting, and had to be abandoned after a trial of ten days. At this date she was very exhausted; the night-sweats were excessive; the temperature 102° in the evening; the appetite *nil*. I now ordered her the hypophosphite of lime in two-grain doses thrice daily, with little hope of any benefit. Two days after taking it she stated that the sweating had entirely disappeared, and she felt and looked brighter.

Without entering too minutely into the case, it may be mentioned that the amendment was steady. The temperature declined, although occasionally there was an increase for three or four days, and sometimes a smart attack of diarrhœa. She remained four months in the hospital, and subsequently went to the Convalescent Home. On her coming from there she wrote to the nurse and stated "that she spat none, had no night-sweats, and was able to follow her usual occupation as a sempstress." A very important fact was also noted—the return and regular continuance of the catamenia after six weeks' use of the treatment detailed.

The next case was that of A. B——, an umbrella-maker, aged fifty. The family history was unimportant, but her present story showed that she had cough, expectoration, and general weakness for three months. Her illness had prevented her working, had reduced her to poverty, and she was thus unable to obtain proper nourishment.

On examination the thorax was emaciated, with dulness on percussion over the right supraspinous and infraclavicular space. The breathing was somewhat tubular over the whole

of the same lung, but at the apex it was distinctly cavernous. The expectoration was nummular and occasionally frothy. The thermometer indicated a temperature of 100·5° in the evening, and 98° in the morning. In addition to these symptoms, it may be mentioned that there was great weakness, a feeble appetite, and very profuse night-sweats. After allowing her to remain in *statu quo* for five days, she was ordered the hypophosphite of lime in the same doses as in the previous case.

Four days afterwards, on the 22nd of April, she voluntarily stated that she felt much better than she had done for months, and that the night-sweats had disappeared. She was kept on the same treatment six weeks, and the report stated that she was "bright and cheery," and that she had gained a pound in weight since her admission.

On May 21st it was deemed advisable, for the sake of experiment, to stop the hypophosphite and try her with cod-liver oil. On May 24th patient complained of sickness, but no vomiting. She had slight sweating on the previous evening, the first time for fourteen days. On the 26th the sickness was gone, but the night-sweats were profuse. On the 27th it was considered right to order the hypophosphites again in the same doses. The treatment thus embraced hypophosphite of lime and cod-liver oil.

During the next six days the sweating continued, but in a less degree. On June 2nd the patient was much better; no night-sweating. She was weighed on this day, and found to be 8 st. 2 lb., being 6 lb. to the good.

From this date the improvement continued. She went to the Convalescent Home, and on her return from it three weeks afterwards, on August 9th, she stated "she was now perfectly well; cough, spitting, and night-sweats entirely gone; and she had resumed her occupation as an umbrella-maker."

One of the most successful cases was a private patient, A. D——, aged seventeen. The family history showed that the mother and two sisters had died of consumption, and at no stage of their illness could cod-liver oil be taken without producing nausea and vomiting, however small the dose might be. She had been kept in the house nearly six months, was rapidly losing flesh, sweating greatly at night, and in a highly nervous state through the knowledge of the previous deaths in the family and fear that she was rapidly sinking. She had an irritable, hacking cough, without much expectoration, and, in her own words, stated "she always felt languid, lazy, and tired out, as if it would be no hardship to be in bed all day."

On examination, I found dulness on percussion on the right side, immediately below the clavicle and beside the sternum. This dulness measured transversely and perpendicularly in the former an inch, in the latter an inch and a half. There was no crepitation, but there was bronchial breathing and bronchophony. Without entering into any theoretical inquiry as to causation, there was little doubt that here was consolidation of the lung, limited in character and extent, and all the general indications of phthisis. I use her own words again, because they are plainer and pithier and freer from technicalities than any I could employ. "I sweated a good deal. I wore flannel, and sometimes it was quite damp, and my face and neck so wet that I had to dry them. I did not sleep for some hours after going to bed, and I was very feverish." This was her state when I saw her first, at the end of May. Cod-liver oil and the usual remedies had been tried and abandoned. I ordered her three grains of the hypophosphite of lime twice daily, and also to make careful thermometric observations, which were continued for two months. For the first two nights the temperature was 101° at night and 100° in the morning. For two weeks afterwards the thermometer was found to stand at 100·5° at night and 99° in the morning. From this time it gradually came down until it was 98·5° at night and 98° in the morning, and it has continued thus until the present time. With regard to the other symptoms, the sweating stopped the first night and did not recur. The cough became less and less, and in six weeks ceased entirely.

In two months from the time of her commencing the hypophosphite treatment she wrote to me from the country, stating that she often walked six miles in the day. In addition to the hypophosphites she inhaled twice daily a weak solution of ipecacuanha wine.

(To be continued.)

NOTE ON THE USE OF THE FORCEPS.

BY THOMAS SAVAGE, M.D., F.R.C.S.,
SENIOR SURGEON TO THE BIRMINGHAM LYING-IN CHARITY.

WHILE I admire and appreciate to the full the work performed by Dr. Johnston during his seven years of mastership of the Rotunda, and published in the *Dublin Medical Journal*, I feel that it would have been better had his remarks in the last report just issued been less strongly expressed in recommending the use of the forceps before the os is fully dilated. Of course, in Dr. Johnston's able hands we know that every care would be used, and that good instead of harm would result; but, in recommending such a practice as a general rule in obstetrics, I cannot help thinking that a door is opened to abuse, and therefore to the production of injurious consequences. Speaking for myself, if I may presume to dictate after so eminent an authority as the Master of the Rotunda, I should feel it to be my duty to be very cautious when setting forth rules of practice for others, especially junior practitioners, and rather to err on the side of timidity than the reverse.

In a large number of cases where forceps are applied before the os is fully dilated a very moderate amount of traction is sufficient to complete delivery; but in a large number also a considerable amount of force will not of itself always liberate the head from the cervix and os, which will require for this end manipulation, and that of a most gentle kind, with the fingers, rather than mere force.

I am very pleased Dr. Johnston lays great stress on the withdrawal of the blades when the head is close to the outlet, as I feel sure a laceration, more or less in extent, is by no means unfrequently produced in the soft parts by either the edges of the blades at the moment of exit, or the too rapid stretching involved; and I have taken for some time the slight trouble to examine carefully the vagina and vulva for a tear after forceps have been used, and I have often found it, notwithstanding great care has been exercised in their use, and with the knowledge of this accident before the practitioner's eyes. Of course I do not apply this liability to the large capacious maternal passages so often met with in pluriparæ as to those which are smaller and more rigid; and I believe the timely removal of the blades has much to do in preventing this accident, while, at the same time, there is less tendency to hæmorrhage if the uterus is not emptied too suddenly, but allowed a short time to contract and expel the child.

Now that the early use of the forceps is advocated by nearly all practitioners, and with so much benefit, all means should be used to make it an instrument as near perfection as possible in its effects, and to this end the formation of any raw surface for the possible absorption of septic matter should be guarded against to the utmost—first, by not tearing the cervix in our perhaps too hasty endeavours to bring down the head; and, secondly, by avoiding any, however trivial, laceration in the soft parts below the cervix.

Birmingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tam aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

REMARKABLE CASE OF PISTOL-SHOT WOUNDS OF HEAD AND CHEST.

FOR the notes of the following case, which presents several points of medico-legal interest, and also for the remarks, we are indebted to Dr. Radcliffe Crocker, resident medical officer.

A young man, aged seventeen, was brought to the hospital on April 4th, at 4 P.M., having shot himself in two places about ten minutes previously. One shot had entered in the cardiac region, the other in the right temple. As

the occurrence took place close to the hospital, Mr. Perry, one of the house-surgeons, saw him very soon after the second shot, and found him lying on his back with his hands clenched and all the muscles rigid; the breathing was stertorous, and the pulse beating strongly. A pistol was resting on his right groin, but not in his hand.

On admission, the man was still alive, and presented the following appearances:—The lips were markedly livid; the countenance dusky; pupils dilated and equal, conjunctiva slightly glazed. The breathing was shallow and catchy, mainly diaphragmatic, the recti abdominis contracting forcibly at intervals; all the rest of the muscles were relaxed. The heart could be seen and felt beating, over an area of about two inches square, with considerable force; and the pulse at the wrist was very distinct. There was an oval wound, about three-quarters of an inch long, two inches below the nipple and an inch and half inside nipple line in the fifth interspace. The edges were blackened, but there was no bleeding. There was no corresponding hole in the clothes. There was another vertical wound, also about three-quarters of an inch long, one inch external to the right eyebrow, the lower end being on a level with it. From this wound a considerable quantity of blood had escaped, and some brain-matter. He died three or four minutes after admission, the respiration ceasing before the heart.

At the post-mortem the bullets were found to have taken the following course. In the thorax the ball had slightly grooved the lower edge of the fifth rib without breaking it, then it passed through the pericardium, tunneling the wall of the left ventricle one and a half inches from the apex, but without opening its cavity; then through the lower lobe of the left lung, entering on the inner surface, and grooving without fracture the upper edge of the tenth rib, about two inches from the spine; it passed upwards under the ninth rib, and lodged there between it and the skin, where it could be felt externally. The pericardium contained a considerable quantity of blood and serum, but no clots, and there was a large quantity of blood in the left pleura. There had been hæmorrhage into the inferior apex of the superior lobe of the left lung, though it had not been wounded by the bullet, and there was much bleeding in the lower lobe in the track of it. In the head the bullet had pierced the frontal bone in the temporal fossa behind the external angular process, making a clean nearly round hole without any splintering, then passed through the frontal lobes just beneath the genu of the corpus callosum, bruising the anterior end of the right corpus striatum in its course, and making a small round hole in the dura mater on the left side, directly opposite the aperture of entrance, and striking the skull, but without injuring it; next passed obliquely backwards, and lodged in the left corpus striatum just outside the optic thalamus. There was a small quantity of dark blood over the whole surface of the brain, a black currant jelly clot in both lateral ventricles, and dark fluid blood in the third ventricle. The temporal muscle and skin round the wound were bruised and blackened. The weapon with which these wounds were inflicted was a Colt's single-barreled breech-loading Deringer pistol, the charge consisting of a copper cartridge containing 45 grains of gunpowder, with a little percussion powder, and carrying a conical bullet weighing 140 grains, with a diameter at the base of $\frac{7}{16}$ inch. The bullets found in the body were only slightly altered in shape.

The case is unusual in several points. First, it is so uncommon for suicides to inflict two mortal wounds on themselves that some authorities have laid it down as a rule that all such cases are homicidal. Secondly, neither bullet had gone through the body. There was abundant evidence of a non-medical character that it was a suicidal act; but, apart from this, from the condition of the body suicide might have been inferred. The pistol resting on the groin and not in the hand, and the fact that two cartridges were found in his pocket, would not be worth much either way; but the absence of any hole in the clothing corresponding to the wound in the thorax indicated that the shirt had been held open for the infliction of the injury—an unlikely act for a homicide. The positions of the wounds were those likely to be selected by a suicide, and easily accessible to his right hand. That in the thorax was doubtless the one first inflicted; for while still alive, the heart's function was shown to be not much interfered with, the increased area of the visible and palpable impulse being evidently due to the blood in the pericardium pushing the heart forwards as he lay on his back, but the ventricle not being opened, the quantity lost was not very great; and it is through hæmorrhage and the compression exerted by its presence in the pericardium that heart-wounds are usually fatal, and when the bleeding is moderate it is not uncommon for life to be prolonged for a considerable time. Thus, out of twenty-nine cases collected by MM. Ollivier and Sanson, only two proved fatal in forty-eight hours, in the others death occurred in from four to twenty-eight days. There is also a case recorded by Fournier where a man died from independent disease six years after being shot in the chest, and the ball was found imbedded in his heart. Further, it is not likely that, after an injury to the brain such as in this case, he would have retained sufficient clearness of thought to open the breech of the pistol, reload, and, pulling his shirt open, select the cardiac region for his second shot, though there are so many cases recorded of acts of volition after severe injuries that one would hesitate to swear that it was absolutely impossible—e.g., Dr. Cunningham's case, in which the breech of a pistol weighing nine drachms passed through the brain and lodged in the tentorium, disorganising the brain extensively, yet he was not even rendered insensible at the time, nor did he lose consciousness for two days, and lived for twenty-four days. Again, Ambrose Paré relates a case of a soldier who received a blow on the head from a halberd which penetrated to the left ventricle, yet the man did not fall, and walked to the surgeon's tent to have his wound dressed, and thence to his own tent, 250 yards away. And still more to the point is the case of a child which was accidentally shot; the bullet traversed both hemispheres, yet cerebral inflammation did not come on for twenty-six days, death occurring on the twenty-ninth. All these cases illustrate what care one should use before giving a positive opinion as to what a person may or may not do after the severest injuries.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

FRACTURE OF THE BASE OF THE SKULL; FACIAL PARALYSIS; RECOVERY.

(Under the care of Mr. CONNEL WHIPPLE.)

INTERCURRENT and temporary facial paralysis appearing a few days after fracture of the base of the skull is an interesting symptom which has hitherto not received the attention it deserves. As far as we know, no adequate explanation has been given, except that offered by Professor John Marshall, in some remarks published in the "Mirror" of Oct. 26th, 1872. The explanation briefly was this, that when the fracture of the base involves the petrous portion of the temporal bone, it generally passes across the aqueduct of Fallopius, in which the facial nerve lies. As repair takes place, callus is thrown out, and the nerve is more or less pressed upon, and facial paralysis ensues. In the course of from ten to fourteen days the paralysis gradually subsides, partly from the absorption of fluid portions of the callus, and partly from the nerve accommodating itself to the pressure. Curiously enough, in one of Mr. Marshall's cases the facial paralysis first showed itself on the day that callus was detected on a broken clavicle.

For the following carefully-prepared notes we are indebted to Dr. C. Gibbes.

James W——, aged forty-seven, a Channel pilot, was admitted 31st December, 1875. About one o'clock A.M. the same day he was returning from the forecastle to the maindeck of a large emigrant ship, having to go down eight or nine steps. When at the top of these steps he turned to speak to the "look-out" man; at the same time he stepped backwards, and, missing the step, fell on to the maindeck, a distance of about five feet. He was picked up unconscious, and placed under the care of the doctor, who stated "that he was very delirious, had profuse bleeding from his nose and right ear, and had retention of urine." He was landed, and admitted into the hospital about one o'clock P.M., in a state of semi-consciousness, but could answer questions if thoroughly aroused. He replied chiefly in monosyllables and in an irritable manner. While being carried to the ward he vomited freely. He was bleeding rather profusely from his right ear; had no paralysis, excepting of the bladder; no chemosis; pupils slightly

dilated, but equal, and not insensible to light. When his right shoulder was touched he appeared to suffer pain.

The room was darkened, and he was ordered a turpentine and castor-oil enema, which acted freely. Ice was applied to his head and iced milk was given to drink. The bleeding from his ear ceased about 5 P.M. About 7 P.M. he became very delirious, and five grains of calomel were ordered. Temperature 100°; pulse 108. The urine was drawn off twice a day. No injury to the shoulder could be detected.

Jan. 1st, 1876.—The latter part of the night was passed rather more quietly. Breathing noisy. At present is very restless. Temperature 99°; pulse 94. Urine acid, 1038; large excess of lithates.—8 P.M.: Has been in a drowsy state all day. No delirium; answers questions better. Had another enema, which acted freely. Temperature 99·2°; pulse 88.

2nd.—Passed a quiet night. Bowels opened once. Talks sensibly at times, and complains of pain in his right lumbar region and in the right shoulder. Temperature 99·4°; pulse 96. In the evening he complained of pain in left side of head. Ordered one ounce of "white mixture" every six hours, if necessary, to keep him purged. Passed water freely. Temperature 99°; pulse 80.

3rd.—Bowels opened freely. Still complains of pain in his head. Temperature 98·6°; pulse 84.—Evening: The blind was drawn up for a short time to-day, but the patient was unable to bear the light. Has slight right facial paralysis. Still very restless. Temperature 98°; pulse 80.

4th.—The facial paralysis is well-marked to-day. Patient seems to remember facts immediately preceding the accident. Urine strongly alkaline. Ordered half a drachm of dilute nitro-hydrochloric acid three times a day.

5th.—Patient talks a great deal when questioned, but hesitates frequently before finishing a sentence. Bowels freely open. Still restless.

6th.—Could not sleep during early part of night on account of severe pain in the head. Urine acid, sp. gr. 1027. Acid mixture once a day only. Allowed some bread with his milk.

8th.—Passed a very restless night, his head being still very bad. Ordered a pint of beef-tea.

9th.—Patient very restless last evening, the right side of his face very flushed. Is, however, better this morning, and sleeping rather heavily.

14th.—Has had flushing of face once since last note, but seems on the whole better. Has had retention of urine, requiring a catheter to be passed; this, however, has passed off.

17th.—The facial paralysis is better, but the pain in the head still continues very severe. The pain in the back is still present, but that in the shoulder is gone. Ordered two drachms of the solution of the perchloride of mercury in water three times a day.

19th.—Pain in left side of head very bad. Ordered blistering fluid to be applied behind the right ear.

22nd.—Pain in head less, and has slept much better since the application of the blister. Facial paralysis slightly better.

25th.—Blister to be repeated. Urine alkaline. The acid and mercury mixture to be combined.

28th.—Facial paralysis much better. Patient able to whistle a little. Pain in head very slight. Allowed the blind up for an hour during the day.

Feb. 5th.—Ordered fish and pudding for dinner. Patient much the same. Light allowed.

9th.—Stop all mixtures. Got up for an hour. Minced meat for dinner.

14th.—Sleeps very well. Pain in head gone. Sat up all day yesterday. Ordered milk diet and a slice of meat.

19th.—Facial paralysis scarcely perceptible. Allowed out-door exercise. Ordinary diet.

25th.—Discharged cured.

LIVERPOOL ROYAL INFIRMARY.

DISLOCATION OF THE FOOT BACKWARDS, WITH FRACTURE OF THE FIBULA; DIVISION OF THE TENDO ACHILLIS; RECOVERY.

(Under the care of Mr. REGINALD HARRISON.)

A PATIENT suffering from this somewhat unusual form of injury has recently been under treatment in Mr. Harrison's ward. M. T——, aged twenty-eight, was admitted into the infirmary on Dec. 26th, 1875, in consequence of an injury to the foot caused by a slip from the curb-stone. On examination the nature of the injury was readily determined. There was shortening of the anterior surface of the foot and elongation of the heel. The toes were pointed downwards. The fibula was fractured obliquely two inches above the malleolus. The tendo Achillis was extremely tense.

Reduction was readily effected by flexing the leg and applying extension to the foot, but by no apparatus or position could the foot be kept in position. Mr. Harrison had the patient placed under ether, and divided the tendo Achillis subcutaneously. The leg was then placed on an iron back splint, with the foot at right angles. By these means the normal position of the parts was maintained, the patient making a good recovery. In six weeks the limb was placed in a plaster-of-Paris bandage, and the patient left the infirmary. He has since been seen, the report being in every respect favourable.

In speaking of this case, Mr. Harrison said that he had only met with two other instances where the injury was precisely similar. In both of these it was found necessary to divide the tendo Achillis. He looked upon this injury as one where the division of the tendon was an essential part of the treatment; in the instances alluded to its adoption had simplified the management of the injury and had in no way interfered with the future usefulness of the limb.

Mr. Cock and Mr. Bryant have both recorded instances of dislocation of the foot backwards, where a similar proceeding was found necessary, from the difficulty experienced in retaining the foot in its position after reduction had been effected.

ADELAIDE HOSPITAL, DUBLIN.

RHINOPLASTY IN A SYPHILITIC SUBJECT.

(Under the care of Dr. BARTON.)

AT the recent debate on syphilis at the Pathological Society, the President, Mr. George Pollock, is reported to have said: "Speaking as a surgeon, he would like to know how it was that plastic operations undertaken on the subjects of tertiary syphilis failed from want of union?" And further on: "He would ask, then, if with tertiary syphilis anything like a Talicotian operation should ever be attempted, although the patient at the time might be presenting no symptoms of the disease with which he was infected." The following case, for the notes of which we are indebted to Mr. Travers Barton, proves that such an operation may be successfully undertaken.

J. P—, aged twenty-seven, was admitted March 21st, 1876. He stated that in March, 1868, he contracted an indurated chancre on the glans penis, followed, in May, by a general eruption over his body, which soon assumed the scaly form. Meantime, the patient neglected to take any care of himself, and the symptoms became so severe that in the July following the eruption had become confluent, and the scales came off, leaving rupious ulcers in their place, principally situated on the calves of the legs and on the bend of the elbows. This ulceration then began to attack his face; an ulcer formed on the left ala of the nose, completely destroying it, and spreading to the right ala, the thickened margin of which soon disappeared. Several other large ulcers formed on the head, one on the forehead being two by three inches in extent. These ulcers were not completely healed until August, 1869.

Ulcers again broke out at Christmas, 1869, lasting till the following May.

In 1872 the patient had an indolent ulcer on the leg, lasting for eighteen months. In November, 1875, he had a small ulcer, the size of a florin, on his left leg, which readily healed with black wash in four weeks.

On March 25th last Dr. Barton performed a rhinoplastic operation by refreshing the margin of the left nostril, and then making a straight incision from a point half an inch below the centre of the lower eyelid to the outer margin of the nostril, and also a semicircular incision from the same point, thus forming a flap half an inch wide in its centre, with a pedicle of about two lines in width. The flap, composed of skin and cellular tissue, was then dissected up and stitched with trout gut sutures to the refreshed margin of the nostril; the edges of the wound in the cheek were next adjusted and held in apposition by three gut sutures. A

plug of oiled lint was then inserted into the newly-formed nostril, beneath the flap a pad of lint was applied on its outer surface.

27th.—The flap looks well, being vascular to its extreme point. Flexible collodion was applied over the wounded surfaces.

28th.—Two of the sutures removed.

29th.—The remainder of the stitches removed. The wound in the cheek is healing rapidly. The flap has completely united.

April 4th.—Patient has got a severe attack of erysipelas, extending from just above the flap into the scalp. Ordered a purge, after which solution of perchloride of iron in half-drachm doses every third hour.

16th.—The erysipelas having completely disappeared, the patient was allowed to get up.

25th.—The patient left the hospital looking well, the flap having contracted so that its free margin did not project beyond that of the right ala; its attached margin was so perfectly united even at the tip of the nose as to leave a very slight scar without any depression.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 9th inst., the President, Sir James Paget, occupying the chair. Three papers, all of considerable interest, were read, but time only permitted of the discussion of one of these—viz., that upon Congenital Hydronephrosis, by Mr. Morris, and the point raised by the author as to the discharge of the urine during fœtal life into the amniotic fluid received general acceptance and additional confirmation from Dr. Graily Hewitt and Dr. Sedgwick. Dr. Gowers contributed a valuable paper on the affection known as "Hammond's Athetosis," and a detailed explanation of the production of the lead line in the gums was afforded in a paper communicated by Dr. Hilton Fagge.

At the commencement of the proceedings the President stated that Prof. Billroth and M. Milne-Edwards had been elected Honorary Fellows of the Society. He remarked upon the melancholy fact of the decease of Prof. Traube on the very day upon which he had been nominated to fill one of the vacancies that had occurred in the list of foreign Fellows.

A paper communicated by Mr. HENRY MORRIS, M.A., M.B., was read, entitled "A Case of Congenital Hydronephrosis, with remarks on the secretion and excretion of urine in the fœtus, and on the facts which tend to prove that during the latter months of intra-uterine life the urine of the fœtus is passed into the cavity of the amnion." A case of congenital hydronephrosis, associated with imperforate rectum, in a child of five days old, was described. The abdomen was considerably distended at the time of birth, and continued to increase in size up to the day when surgical aid was sought. After the passage of a catheter along the urethra, a large quantity of urine escaped, and, after an operation had been performed for the purpose of establishing a communication between the rectum and anus, a free discharge of meconium followed. The abdomen subsequently became quite flaccid, but the child died of exhaustion on the seventh day after birth, and on the second day after the operation. No post-mortem examination was allowed by the parents. From the symptoms of the case, as well as from the records of other analogous cases, it is to be inferred that a slight membranous obstruction in the urethra, sufficient to frustrate the slender efforts of the child to expel the contents of the distended bladder, was broken down by the catheter. Other possible explanations are considered, but rejected as being less probable than that above stated. Congenital hydronephrosis, like each of many other congenital deformities, frequently coexists with one or more malformations in the same subject. Thus clubfoot, hare-lip, imperforate anus, and the absence of a prostate gland have each been associated with congenital hydronephrosis. It is more frequent to find both kidneys affected than only one, and the most common cause of the condition is imperforate urethra or impervious ureters. The question is considered whether, in these cases, the enormous distension of the urinary organs arises from over-excretion on the part of the fœtal kidneys, or from retention of urine through some mechanical obstruction of the passages. It is concluded that the number of cases in which the obstruction and the distension have occurred together is too great to allow of their co-existence being considered accidental, yet the only relation which can possibly be conceived between the two conditions is that of cause and effect. The question which next arises is: "Does not the urine, during the later period, at least, of gestation, ordinarily flow into the liquor amnii, so as to avoid causing congenital hydronephrosis?" Upon this subject, although physiologists are silent, there have been many opinions expressed in favour of an affirmative reply. In illustration of this, excerpts are contained in the paper from the writings of Lee, Prout, Kennedy, Billard, and Howship, and from the Obstetrical Transactions. Before accepting this view as to the excretion of the urine, further proof is sought for in the analysis of the liquor amnii, since there ought to be evidence of some of the constituents of urine in that fluid, if the view be correct. From analyses made by Rees, Frommberg, Wöhler, Gusserow, and others, the presence of urea and many of the salts of urine in the fluid of the amnion has been proved beyond question. On the other hand, the urine of the fœtus in some cases of congenital hydronephrosis has been found to be devoid of urea by Kennedy and Madge. It ought not, however, to be inferred from this that urea had never been formed in these fœtuses, but rather that, owing to the crystalloid character of urea, this substance has escaped from the blood and from the retained urine of the fœtus into the blood of the mother; and it is further suggested that urea may in this same way even disappear altogether from the liquor amnii when fresh quantities cease to be excreted from the fœtal organs. But, dismissing all speculative reasonings, it may be stated that the following are well ascertained facts:—(*a*) That when an obstruction has existed in the urinary organs of the fœtus, the secretion of urine has gone on to a sufficient extent to cause changes similar to those which are seen in the urinary organs of adults after retention. (*b*) That the liquor amnii has been proved to contain urea, besides many salts such as those which are formed in normal urine. (*c*) That fœtal urine in some cases of hydronephrosis has been found not to contain either urea or uric acid, or to contain urea only in very small quantity. The conclusions which appear to be warranted by these facts are —1. That urine is secreted in considerable quantity during intra-uterine life. 2. That this quantity is far too great to be stored up in a normal bladder and normal ureters. 3. That during the latter part of gestation, at least, urine is passed off through the urethra of the fœtus into the sac of the amnion. 4. That the proportion of urea in fœtal urine is in all probability smaller than it is in the urine secreted after birth, and that, as in cases of congenital hydronephrosis both urea and uric acid have been absent from the urine, it is possible they may also be absent from the liquor amnii. 5. That the quantity of urea in liquor amnii is very small, not exceeding 5 per 1000. 6. That the gradual decrease in the proportion of albumen in liquor amnii as pregnancy advances (from 10·77 per cent. in the fourth month to 0·82 at the ninth month, as stated by Taylor) gives some support to the view that the fluid of the amnion is constantly altered by the admixture of some non-albuminous fluid, such as urine, and that this conclusion will be further strengthened if future analyses show that the proportionate quantity of urea and the salts of urine in the liquor amnii increases as the proportionate quantity of albumen diminishes. 7. That the presence in liquor amnii of other of the constituents of normal urine, besides urea, gives support to the same opinion. Although there is something revolting in the idea that for a period of many weeks every human being has lived and floated in a medium partly composed of its own urine, yet the fact ought not to be ignored, as it is a matter of great interest and importance in the development of the life-history of the fœtus, while the condition of the fœtus which results from an obstruction to the escape

of the urine ought to be borne in mind by the accoucheur, as it may give rise to tedious and protracted labour, or may even render parturition impossible to the mother till after the destruction of her child.—Dr. GRAILY HEWITT thought the paper very interesting, and one worthy of all approbation. He had been in the habit of alluding in his lectures to the probability of the fœtal urine escaping into the allantoic sac, basing this statement upon facts similar to those mentioned by the author—viz., that in certain cases, where there has been congenital obstruction in the urethra, there has been great distension of the higher urinary passages. Hence it was impossible to escape the conclusion at which Mr. Morris arrives, that the fœtus is bathed in its own excreted fluids. Another circumstance bearing upon the secretion of urine in fœtal life was the presence, not unfrequently, of uric acid crystals in the fœtal kidney.—Mr. T. SMITH considered that the author had conclusively proved his point as to the passage of the fœtal urine into the amniotic fluid. He remarked upon the very striking infrequency of cases in which there was not some exit for the urine at birth, as contrasted with the frequency of cases of imperforate anus. He had not yet seen one of the former class in the post-mortem room, although about three days ago he met with an interesting clinical example. A child eight days old was admitted into the Hospital for Sick Children with imperforate anus. There had been no complaint made as to inability of micturition. The abdomen was fully distended, and at the anus there was a blind pouch two or three inches in length. Chloroform was administered, and Mr. Marsh operated, but failed to find the rectum. The mother of the child strongly desiring further resort to operative measures, Mr. Marsh made an incision in the left loin, exposing a greatly enlarged and dilated kidney, and below that a greatly distended ureter, which was so large as to be mistaken for colon. It was laid open, and with the escape of urine the renal tumour above collapsed. The child was still living. It was the only case of congenital hydronephrosis he had met with.—Mr. HULKE inquired whether, in cases of obstruction to the outflow of urine, the quantity of the amniotic fluid was deficient or not.—Dr. HEWITT was not aware of any observations on this point.—Dr. SEDGWICK thought that most physiologists would accept the views propounded by Mr. Morris as to the excretion of urine in the fœtus. As further evidence of this he adduced the statement of Claude Bernard that the urine excreted in the first six months of fœtal life contained sugar, the proportion of which gradually diminished as birth was approached. It was just in the period in which the urinary bladder contained sugar that the same substance was present in the liquor amnii. He referred to some papers on congenital hydronephrosis, treated with especial reference to its complicating labour, published several years ago in French journals.—Mr. MORRIS, in reply, said that but few cases of congenital hydronephrosis were evident in infantile life; but there were some cases on record, like that related by Mr. Smith, in which the obstruction has been so extreme, and the distension of the abdomen so great, as to interfere with labour, so that operative measures had to be resorted to. Mr. Hulke's remark was a very pointed one, but the quantity of the liquor amnii was too inconstant to admit of any deductions being drawn from it.

A paper was then read (in abstract) "On Athetosis and Post-hemiplegic Disorders of Movement," by Dr. W. R. GOWERS. The object of the paper was to bring forward two cases of disordered movement analogous to that to which Hammond has given the name of "athetosis," and to consider the relations of that affection in a general survey of the various forms of unilateral motor disturbance. One of the cases had presented slow involuntary movements, leading to various distorted positions of the hand, and a similar, although less striking, condition in the foot. The condition had supervened on a slight attack of hemiplegia. Under electrical treatment the spontaneous movements, after having existed two years, ceased, only inco-ordination of voluntary movement remaining. In the other case the movements were slight, and only characteristic during extension of the hand. They had been preceded for some time by unilateral numbness. It was pointed out that neither the clinical history nor the supposed pathology of athetosis afford grounds for separating it from other forms of disordered movement commonly seen after hemiplegia, any one of which may occur as a primary affection. The essential element in athetosis is a slow, remitting, mobile spasm, and it differs from the common post-hemiplegic contracture chiefly in the absence of fixed spasm. The varieties of quick intermitting spasm, regular and irregular, were then described, and its effect in producing inco-ordination, both choreiform and violent. In a case described of extreme inco-ordination of the arm after hemiplegia, the post-mortem showed a cicatricial induration extending through the middle of the optic thalamus due to old softening. There was no secondary degeneration of the spinal cord. In "late rigidity," it was pointed out, two elements may be discerned: one varying, ceasing during sleep, increased by an attempt at movement; the other unvarying. The latter only is to be referred to the changes in cord and muscle; the former possesses many features in common with mobile spasm, and is probably to be referred to brain changes. Several illustrative cases were shown, and a table was exhibited grouping the various disorders of movement under the three heads of "intermitting," "remitting," and "fixed" spasm.

Dr. HILTON FAGGE read a paper on the Lead-line on the Gums. The author has in two cases investigated the microscopical characters of the gingival tissues when affected with the lead-line. He finds that the discolouration is not uniform, but is distributed in the form of rounded loops corresponding with the vascular papillæ of the mucous membrane. Under a higher power the pigment is seen to consist of granules, some of which are deposited on the interior of the smallest bloodvessels, others immediately outside them. Adopting Mr. Tomes's hypothesis that the pigment is a sulphuret of lead, and that the sulphuretted hydrogen which forms it is derived from decomposing animal matters which have been retained in the tartar or between the teeth, the author next points out that the gas must diffuse itself into the textures of the gum, and combine with the lead as it is actually circulating in the blood, or contained in the plasma which is for the nourishment of the textures. The pigment is thus a precipitate from the blood. This view explains the fact that a characteristic line in the gums is sometimes seen in those who have not shown symptoms of lead poisoning. When occurring under such circumstances it has been supposed by certain writers to have been caused by the presence of some other metal, such as bismuth. The author thinks it depends on the very minute quantity of lead which has in such cases gained entrance into the body. Another point explicable upon the author's theory of the lead-line is that the administration of iodide of potassium sometimes brings it out, where it had before been absent, and after the individual has ceased to be exposed to the poison. It also follows that the line must be wanting in those who keep the teeth very clean. Lastly, it seems probable that the sulphides of lead must be deposited in the intestinal mucous membrane likewise, under the influence of the sulphuretted hydrogen contained in the bowel.—Mr. NUNN referred to a remarkable instance, brought before the Pathological Society many years ago by Dr. Williams, of staining of the intestinal mucous membrane in a patient who had been in the habit of taking large doses of mercury.

The Society then adjourned.

AT the last weekly meeting of the Salford Board of Guardians a lengthy discussion took place on the necessity for providing hospital accommodation for pauper cases of infectious diseases apart from the workhouse. The Board vigorously condemned the apathy of the Town Council, as the sanitary authority for the borough, in not having long ago made provision for non-pauper cases of these diseases. The present epidemic of small-pox in Salford has evidently awakened the local authorities to the neglect of their sanitary duties. It appears to be matter for regret that the Board of Guardians and the sanitary authority cannot co-operate for the purpose of providing joint hospital accommodation for infectious diseases, which would conduce both to economy and efficiency. The Board of Guardians, however, decided to appoint a committee to ascertain whether a suitable site could be obtained for infectious pauper cases at some distance from the workhouse. Pending the deliberations of the committee, the fatal prevalence of small-pox increases.

REPORT
OF
The Lancet Sanitary Commission
ON THE
WATER-SUPPLY OF HASTINGS.

HASTINGS and St. Leonard's, being continuous and under the same municipal government, may properly be considered as a single town. Few watering-places possess such remarkable advantages of soil, climate, and natural beauty, and few can boast of a wider popularity. The unfavourable reports which have recently been spread with regard to the water-supply of the place have therefore a national importance, and have induced us to institute independent inquiries in the interests of medical science.

Following our usual custom, we placed ourselves from the first in communication with the town authorities, in whose hands the water-supply is vested. We received from them the fullest information and the most courteous assistance, and, although we are compelled to differ from their views in some respects, we gladly give them the credit due to zeal and energy, and to an obvious desire to do their best for the town under somewhat difficult circumstances. Our especial thanks are due to Mr. Brown, the chairman of the water committee; to Mr. Andrews, the borough surveyor; and to Mr. Ashenden, the medical officer of health.

The total watershed area available to Hastings may be roughly described as a triangle, with the sea for a base. It is, unfortunately, very small, not covering more than 3000 or 4000 acres, and is broken into glens which run down to the sea. It lies in the Wealden deposit, and consists partly of sand and partly of clay. The surrounding hills are steep, the strata are broken by numerous faults and fissures, their dip is not favourable for the accumulation of water, and a considerable portion of the district is thickly populated. Hence the water-supply of the town has for some time been the cause of anxiety, especially as a large part of the watershed is outside the municipal boundary—a circumstance always to be regretted, but especially objectionable when the drainage area is so limited. Last year a very valuable report upon the subject by Mr. Topley, of the Geological Survey, was obtained by the Town Council, and some of Mr. Topley's recommendations have already been adopted, though others seem to have been ignored. Constant additions have been made to the town supply, and some improvements effected. A very large sum has already been expended on the works, and yet it is admitted that the result has not hitherto been wholly satisfactory. Further changes are in progress or contemplated, and much further improvement will no doubt be effected, but still we fear it is probable that, after all is done, the water-supply on the present system cannot be worthy of the town. We take this view with unfeigned regret.

The present supply is derived, firstly, from wells; secondly, from surface drainage; and, thirdly, from superficial springs. A well at Hollington has lately been acquired by the Corporation which at present supplies St. Leonard's only, and is estimated to yield 75,000 gallons a day. The water appears to be good, and it is now proposed to add it to the general town supply—a proposal very naturally resented by the inhabitants of St. Leonard's. Four large wells in the valley of the Old Roar yielded last year about 210,000 gallons, and an old well near the gasworks about 40,000 gallons a day. The last-named well is a curious one, as it communicates with subterranean fissures of unknown extent, which prevent the water from rising above a certain height; it is, in fact, utilised as a large storage reservoir. There appears, however, some danger in this practice, as no one can say how near the fissures come to the surface, nor how far they reach. It is even suggested that there may be a direct communication between this reservoir and some of the old and undoubtedly polluted wells of the town. The storage of this reservoir is roughly estimated at 50,000,000 gallons, and it is connected by mains with all the wells and reservoirs of the town, except the well at Hollington, and even that will shortly be included.

The supply of water obtainable from deep wells in the district is naturally limited, and it is therefore necessary to supplement this supply with superficial spring and surface drainage water. At Shornden, and in the valleys of the Old Roar, Clive, and Ecclesbourne, reservoirs have been constructed which are supplied from these sources. Each of these collects and stores the water of the surrounding springs, and in one or two cases impounds a stream. That in the Old Roar valley, which holds 25,000,000 gallons, is the largest. It is fed at the upper end by the Old Roar stream, which flows down a valley now pretty thickly inhabited. This stream is most objectionable; common ditches supply it, and in one place we traced the black drainage of a farmyard running straight into it. The houses around are undrained, and there is a certain and obvious risk that actual sewage may at times find its way down. The water flowing into the reservoir was quite opaque at the time of our visit from suspended matter, and utterly unfit for drinking. We were told that when it is "very bad" they send it direct into the sewer. It would be interesting to see it in this condition.

The springs which contribute to the reservoir seem little better. Some of them, here and elsewhere, rise in highly-cultivated fields or in nursery gardens, and the water is carried to the reservoir by pipes sunk to the requisite depth. As water can rise to the surface, so it can sink, and it is evident that some of the manure applied to the land must be carried in solution or suspension into the town water-supply. Drawing water from these springs, or rather drain-pipes, we found it in almost every case very turbid. Before entering the reservoir, the water, it is true, passes through a filter, but so inefficient is this filter that the water seemed to be hardly altered by its passage through it. Every glassful of the water of the reservoir was distinctly opalescent, and in almost every glassful water-fleas could be seen in active motion.

Ecclesbourne and the two Clive reservoirs presented similar features. The former is to a great extent supplied by a spring which rises at Fairlight, and is brought down by a conduit which we can only describe as a ditch. In all three the water was opalescent and swarming with water-fleas, and here no pretence of filtering is made, but the water is sent straight into the mains. Several of the springs rose in ploughed fields, and all as they entered the reservoirs were turbid. Here and elsewhere the arrangements for avoiding the chance of serious pollution seemed to us quite inadequate. We found old pipes, nominally disused, in their original places, suggesting doubts, and in one case a conviction, of the possibility of unsuspected contamination. Polluted ditches passed close by the reservoirs, houses and pigsties stood in dangerous proximity, and though it is possible that no mischief is now done by any of these surroundings, it is, on the other hand, obviously possible that very serious mischief may at any time arise.

With regard to the general character of the water drawn from these various sources, we cannot hesitate to say that it is unsatisfactory and dangerous. Not only was the water of most of the reservoirs opalescent at the time of our visit; it was actually opalescent in the mains. We watched the rise of the water at the old well, we caught the water as it issued from the mains, and we drew it from the reservoirs. It was in each case turbid, and although we are fully aware that it is not always as bad, we must assert that water so liable to pollution is not fit for the supply of an important town. The pollution may not be, and probably is not at present, of a noxious character, but there is no security that it will not at some future time become suddenly most dangerous.

The filtering arrangements at present available are most unsatisfactory, and the so-called filtration is in fact mere straining. It is now proposed to increase the number of filtering-beds, and we hope their efficiency; but even then some of the most suspicious water will, we understand, be delivered, as now, unfiltered. If such water must be used

at all for drinking purposes, it is essential that it should be most carefully filtered immediately before delivery. Even then the water would, in our judgment, remain suspicious, for no filtration can remove the most dangerous contaminations to which water is liable. It must be remembered that even chemical analysis is no certain guide in this matter. The pollution arising from one patient suffering from zymotic disease may render the water-supply of a whole town poisonous, and water which is pure and sweet to-day may become deadly to-morrow. It is often only when a devastating epidemic has set in that the special contamination to which it is due is discovered.

We come next to the question of quantity. The present population of Hastings and St. Leonard's may be taken at 35,000, exclusive of the swarm of autumn visitors. The rate of increase is said to be about 1000 per annum, and there seems to be no reason why it should not be much greater in future. The borough surveyor estimates that at the present time 25,000 persons only are supplied with water, but we are inclined to think, from the facts laid before us, that the real number must be nearer to 30,000. Moreover the private wells which supplement the town supply are in many cases badly polluted and should not be used at all, and altogether, allowing for the exceptional wants of the autumn, when water is most important, it is no exaggeration to say that a present population of 40,000 should be provided for.

Now, it may be safely asserted that 25 gallons per head is the smallest daily allowance that is sufficient for a town like Hastings. This gives a daily requirement of 1,000,000 gallons. Manufacturing towns often require more. In London the allowance is about 30 gallons per head, and in some places it is still higher. A smaller quantity would, of course, be sufficient, with economy, for actual sanitary necessities; but in a fashionable watering-place the supply should be abundant, if only for the reputation of the place. It is highly desirable that a constant supply should be provided, and liberal allowance should be made for the flushing of sewers and the watering of gardens. We fear the former of these duties is neglected in Hastings. The intercepting sewer is flushed by sea-water; but with so insufficient a supply of water it is hardly possible to do much with the street sewers, especially in the autumn, when flushing is most important. In Hastings, the average daily consumption of water is said to be 500,000 gallons; and in 1874, a very dry year, it was little over 400,000 gallons. The permanent supply from deep wells has since been increased, and in average years the supply is undoubtedly in excess of the estimated present consumption. Last year the average daily consumption was about 640,000 gallons; and with the additional works now proposed, and careful storage, the proper quantity might, no doubt, in favourable years, be obtained. But bad years have to be provided for as well as good ones, and even bad seasons. In four months of 1874, and those the most important months of the year—namely, July to October,—the daily consumption fell to 300,000 gallons: that is, 12 gallons a head for a population of 25,000, or 7½ gallons a head for a population of 40,000—the latter estimate being certainly the more probable, as the town was crowded with visitors.

Then again we have to consider the quality as well as the quantity of the supply. Putting the highest estimate on the figures before us, we infer that the deep wells, the yield of which is pretty steady and the water of which is good, cannot be expected, with all improvements, to yield more than about 400,000 gallons a day. The rest must be made up by the impounding and storage of land drainage and superficial springs. We have already shown that much of the present water-supply is obtained in this way. It is now proposed to construct similar works, with the addition, we are glad to say, of filter-beds, in the Fairlight and Warren valleys. These valleys are almost though not quite uninhabited at present, and are, for the most part, uncultivated. Their streams are already impounded, and the water is sometimes added to the town supply, no doubt to its advantage. But water of this kind is peculiarly liable to accidental and unexpected contamination, and, after all, these new supplies will hardly do more than balance, if they do balance, the losses which must be submitted to elsewhere. The Old Roar and Clive reservoirs, if not those of Ecclesbourne and Shornden, must shortly be relinquished. They are getting too dangerous, and we are glad to find that our judgment on this point is confirmed by the advice distinctly given in his report by Mr. Topley.

Then again such water can only be utilised in dry seasons by previous storage. In such seasons the supply is sure to fall very short. But water of this kind is ill-adapted for storage, and during a long drought becomes very bad, and sometimes even dangerous. The reservoirs are sure to become lined with putrefying mud, and even the most careful filtration will not then render the water fit for use.

Our observations seem to point to the following conclusions:—

1. That the available water-supply of Hastings is insufficient in quantity for the present, and still more for the future, wants of the town.

2. That a portion of the water-supply—namely, that derived from the Hollington and Old Roar wells—is satisfactory in quality.

3. That another portion is less satisfactory, as exposed to constant risk of unforeseen and dangerous contamination.

4. That the remaining portion should be abandoned at once, at whatever cost.

5. That it would be wise to consider at once the possibility of obtaining, from a distance if need be, an abundant supply, on the constant system, of water of a quality which shall free the town from future suspicion, and provide for its rapid growth.

With regard to the last point, it may be mentioned that several schemes for a new supply have already been suggested. It would be premature to discuss them now. The present supply is tolerably soft, and it would certainly be desirable to secure, if possible, equal softness in the water adopted. But the matter is of little moment compared with the risk arising from organic contamination. The charges brought against hard water are entirely unsupported by proof, and are pretty generally discredited in the present day. It is universally admitted that the best water that London receives is the very hard water of the Kent Company.

We earnestly commend these remarks to the consideration of the Town Council. We fully appreciate the difficulties with which they have had to contend and those they have still to meet. To abandon what appears to be the natural water-supply of a town, and go to a distance, sacrificing thereby much of the expense previously incurred, is a grave matter, and one which requires anxious thought. We have no wish to dictate to them, still less to blame them for their past exertions. It may be that the suggested changes will prove too uncertain or too expensive for adoption. We hope and, indeed, think, otherwise. The boldest policy in such matters is commonly the best policy, and it is well to remember that almost any present economy would be dearly purchased by an arrest in the development of one of the finest and most flourishing of English watering-places. In the present day a bad character for water-supply is fatal to the reputation of any place which claims to be a health resort.

CHLORAL IN LABOUR.

THE value of chloral during labour was the subject of a late discussion at the Société de Médecine of Paris. M. Polaillon maintained that it was of use only to combat irregular contractions, and that in general, instead of allaying pain and permitting delivery, it only relieves suffering by arresting labour. The conclusions were founded upon its use in eighteen cases, in none of which had hæmorrhage occurred, so that the use of chloral did not appear to increase the liability to hæmorrhage. The sedative influence of chloral in these cases he believed to be more profound than that of chloroform. In one case chloroform was given after sixty grains of chloral had been taken, but without noticeable consequences. In cases of threatened abortion he had not found it so good as opium, but a combination of chloral and opium had been given with advantage by M. Charrier. From the discrepancy of opinion as to the effect of chloroform upon the uterine pains, it would appear that chloroform is less frequently employed during labour in France than in England. The chloral was given by injection, as much as seven or eight grammes having been in some cases administered.

THE LANCET.

LONDON: SATURDAY, MAY 13, 1876.

WE have frequently felt it to be our duty to protest against the inordinate growth of specialism and the multiplication of special hospitals, and especially of those intended for some of the narrower specialties. The most effectual check to illegitimate growth of special institutions would undoubtedly be the establishment of special departments in the large general hospitals. In some of the metropolitan hospitals the importance of the specialties has ong been acknowledged, and adequate provision made for them; in others the recognition has been more tardy. It is, for instance, only within the last few weeks that any distinct and definite arrangements have been made at University College Hospital for the treatment of diseases of the throat and the ear. In the course of time the special departments of surgical and medical practice will doubtless be as adequately represented in the large tutorial hospitals in this country as their growing importance deserves. Meanwhile in many instances the cause of medical education is suffering. The time has now come when every general hospital should have its complement of special departments presided over by skilled practitioners and teachers, or, what would perhaps be equally effectual, the rich material possessed by some of the large special hospitals should be utilised for tutorial purposes. It cannot be denied that at the present time the state of things which exists at not a few medical schools is by no means satisfactory. We cannot grudge a certain Viennese doctor his amusement at the condition of affairs which he witnessed here, and afterwards vividly described. It appeared to him, and his statement cannot unfortunately be impugned, that, in London, a gentleman might one year lecture on botany, the next year on comparative anatomy, the following one on physiology, and probably at the end of the fourth year congratulated himself at being installed into the chair of surgery. The reason that such things can be is that there are many teachers and but few professors in the strict sense of the term. The remuneration attached to each lectureship is unfortunately so small that when a lecturer sees a more lucrative post than his own fall vacant he often casts a longing eye on it, without considering whether such change will be of advantage to the students or not. The system rather than the man is to blame for such a state of things. In Paris, Berlin, or Vienna a young man of talent and industry can early in life mark out his path with a view to ultimately securing a professorial chair which he knows carries with it, not only honour, but at least a competence. It is said that every French soldier carries in his knapsack a marshal's baton, and it may with equal truth be affirmed that every French medical student has in his pocket a professor's gown. In London it is almost impossible for a lecturer to subsist on his salary, and hence it is that teaching and private practice are usually combined, too often to the great detriment of the former. On the Continent the professors of anatomy, physiology, &c., do not engage in practice, but devote all their time to their special pursuits, to the manifest advantage of science and the students; and they are able to dispense with practice because the remuneration attached to their office is sufficiently large to enable them to do so. Here, unfortunately, there are but few chairs which could support a bachelor, and probably not one that would enable a married man with a family to provide for his wants; and the salaries are small because the sum total of the fees received from the students each year has to be divided among so many teachers. *Hence it is evident that the evil of the condition we have described lies in the multiplicity of the medical schools of the metropolis.* If the existing eleven medical schools could be rolled into three or four, the result would be that the salaries of the teachers could be sufficiently augmented to induce a number of men to lay themselves out entirely for teaching, and to dispense with private practice. The students would thus gain greatly by the services of men whose whole time and thoughts were occupied in the one subject they taught, and our profession would not be so much indebted to foreign schools for anatomy, physiology, pathology, &c. But such a desirable consummation is not to be attained unless many of our present schools will amalgamate and the interested teachers be prepared to give up something and unite on a basis of conciliation. By this means both the general and special departments of practice would be more thoroughly and efficiently cultivated. If the general hospitals had had the wisdom and foresight to institute special departments within their own walls, it is doubtful whether there would now have been a special hospital in existence. Take diseases of the eye, for instance. When the hospital at Moorfields was established not a single general hospital possessed an eye department, and it is only very recently that certain hospitals have done that which ought to have been done thirty years ago. The same may be said of other special hospitals. When the Hospital for Diseases of the Skin was opened at Blackfriars there was not a general hospital in London which possessed a skin department. Then, again, when St. Peter's Hospital for Stone and Urinary Diseases was founded, there was not to be found in any London hospital a single special department representing that branch of surgery, although the Necker Hospital in Paris, and the Bellevue in New York, had long ago possessed such special departments. Hence, it may be said that general hospitals, by their default, unwittingly supplied every special hospital with its *raison d'être*. Even now it is interesting to observe how special departments in some general hospitals are made to subserve the interests of certain persons. At one hospital there was, at one period, a department for the ear and another for the eye, but when the aural post became vacant it was not filled up, and when the eye no longer received the attention of a special officer it was swallowed up by a surgeon on the general staff who, one would have thought, had his time already sufficiently occupied. At another general hospital the unfortunate eye shared a similar fate, and the interests of the students were lost sight of. We could multiply instances if required. We should like to know how it is that at one hospital the eye and ear are each considered worthy of receiving the attention of a special officer, whilst at an-

other institution the two organs are rolled into one? At a third hospital the skin is elevated into a special department, whilst at a fourth it is not looked upon as eligible for such a distinction. Not long ago one hospital possessed a special tendon-cutter: it would be worth while to know why the office was established, and why abolished after some years' existence? So long as a state of things exist such as we have been describing, so long will the interests of students suffer accordingly. Each hospital having a medical school ought to take care that the various special departments are instituted and officered.

The question now arises—Would it not be well if those hospitals which had not completed their special departments were to seek to obtain the necessary officers from existing special hospitals, and to offer such inducements as would lead to the absorption of the special institution by the general, and its resurrection as a special department of the latter? If the smaller hospitals do not entertain the question of amalgamation, it may, by and by, be forced upon them in a way they but little suspect. The effect of special hospitals is, and will be, to rob the smaller general hospitals of some of their most interesting cases. The larger hospitals have so much material to select from that they will never experience any difficulty in supplying their special departments with the necessary cases for clinical instruction. At one of the hospitals, by no means the smallest, we understand that there has not been a single case of stone in the bladder during the past year, and that certain other hospitals were not in much better plight. How can the students at those institutions be properly instructed if such a state of things exists? And we maintain that each year the evil will be aggravated. Is it not likely that they will recommend their friends who are about to enter the profession to select one of the largest hospitals where such a dearth of stone cases is not likely to occur? It is therefore very clear that if some of the smaller general hospitals could only induce certain of the special hospitals to amalgamate with them the former would be greatly strengthening themselves. The object will no doubt in many instances be found difficult, and in some impossible, of execution, and it will in all cases be wise to leave to time the creation of the favourable opportunity. As special hospitals prosper so will they require to extend their premises, and that leads to removal or rebuilding. At the present time St. Peter's Hospital is searching for a site upon which to build a new institution, and we see from the report that it has something like £12,000 with which to commence the undertaking. We throw it out as a suggestion merely to the authorities of St. Mary's Hospital, or of the Middlesex Hospital, whether it would not be a wise and timely act on their part if they could but secure, by amalgamation, both the men and the money belonging to St. Peter's? Either of these hospitals would be greatly strengthened by the incorporation of St. Peter's Hospital, and the establishment of a special department for the diseases of the urinary organs, such as exists at the Necker Hospital in Paris and the Bellevue in New York. We believe that the establishment of such a department at either of these institutions would be a veritable *pièce de resistance*, and would not fail to attract and secure a large accession of students. Such an occasion as the present may never again offer itself, and in pointing it out we feel we have only been discharging a public duty.

THE period of the annual election of members of the Council of the Royal College of Surgeons of England is rapidly drawing near. The retiring members are Mr. JOHN SIMON, Mr. LUTHER HOLDEN, and Dr. GEORGE M. HUMPHRY, of Cambridge. In addition to these, there is a vacancy caused by the recent death of Mr. GEORGE SOUTHAM, of Manchester. It is premature, perhaps, to seriously consider the prospects of the eligible candidates. The Fellows in the country naturally wish to be represented by some provincial Fellow. Such a representation is desirable, but it is a mistake to imagine that the interests of the metropolitan Fellows clash in any way with those of the provincial Fellows. What is good for London is equally good for the country. Nor should it be forgotten that the bulk of the work of the Council really devolves on those residing in London. It is, however, none the less true that Dr. HUMPHRY has always discharged his duties as a member of the Council with praiseworthy diligence and zeal. While the re-election of Dr. HUMPHRY is confidently anticipated, a strong feeling seems to prevail that Oxford should have a representative. This may be; but if a provincial Fellow be elected, he should, we think, be in some degree the actual representative of one of the large provincial medical schools. It remains with the Fellows in the country to decide for themselves whom they shall elect as a representative to succeed the late Mr. SOUTHAM. The rare business capacity, the tried administrative skill, the mature experience, and the ripe judgment of Mr. SIMON are almost indispensable, and we trust that this gentleman will long continue to interest himself in the important questions of medical politics and medical education.

THE fact that alcohol is consumed in this country by a considerable proportion of its population to deleterious excess is, we are glad to see, passing into the region of platitude, so far as the business aspect of the temperance question is concerned. The Duke of WESTMINSTER, at the recent temperance conference at Rhyl, wisely advised the speakers not to dwell on the evils of intemperance, but to confine their remarks to the proposed remedies for the evil. Of the extent to which the evil prevails there can also be very little question. It confronts everyone, abroad and at home, at midnight and noonday. It provides our own profession with a large part of its daily work, and with some of the most profoundly difficult problems for which it is ever striving to find, if it may, some practical solution.

The question whether this evil is growing or becoming less is of the utmost importance, to which very various answers have been given. An interesting attempt to estimate the value and significance of the statistics which have been put forward appears in a recent number of *The Times*. At first sight the figures appear to settle the question in a summary manner, and are indeed, in their proportions, startling. On the one hand they show a prodigious increase in the amount of alcohol consumed. They show that alcoholic

liquors are consumed not only more abundantly, but of stronger quality. From 1860 to 1874 the consumption of malt for each head of the population increased 35 per cent., and the consumption of spirit 28 per cent. On the other hand, the convictions for drunkenness have during the ten years preceding 1874 increased nearly ten times as much as the increase in population, or 85 per cent., while the population has increased only 9 per cent. But there are considerations, clearly pointed out in the article to which we refer, which alter very much the significance of these figures. They illustrate, indeed, in a striking manner the fallacies of direct inference from simple figures. This is the case especially with regard to the second set of statistics. It was pointed out some time ago, and was noticed in our columns, how little the numerical increase in committals for drunkenness in Ireland could be taken as evidence of an actual increase in the offence. The English statistics have even less significance. The increase in the number of police, the diminution in the number of public-houses, the shortening of the hours during which drink is sold, have all conspired to render the offence more frequently punished in proportion to its occurrence. Some influence, also, may probably be ascribed to a more rigorous standard of sobriety and orderliness on the part of the police, who have to discriminate as to the degree of drunkenness at which their interference is justified. The influence of these collateral circumstances in causing the increased number of prosecutions is strikingly shown in the effect of the new Licensing Act. It is notorious that the effect of that Act was to diminish very considerably the actual amount of drunkenness; nevertheless its immediate effect was to increase the number of convictions for drunkenness. The annual increase between 1863 and 1871 was 7 per cent., but in the first year of operation of the new Licensing Act the increase was 23 per cent., while in the following year the increase was only 1·5 per cent. It is obvious, therefore, that these numbers are no gauge of the intemperance of the country. Their increase, at any rate, does not show an increase in the amount of intemperance; while the figures for the last year, so far as we have reason to believe that the police vigilance is maintained, afford ground for hope that the amount of intemperance is actually decreasing.

The statistics which show an increasing consumption of alcohol per head are of much graver significance. It is to a slight extent only relieved by the circumstance to which the writer in *The Times* calls attention, that there has been a corresponding increase in the consumption of every article of food, and that the increase in the consumption of alcohol is less than that of tea. The increase is rendered still more significant by the circumstance that, as the lower classes have always furnished the bulk of the drunkards of this country, the augmented consumption of alcohol by them is more likely to be an indication of excess than is that of other articles of food.

If we may take as correct the opinion of the majority of our profession, that the addition of a certain quantity of alcohol to daily food is to many positively advantageous, the question comes, Does the total amount of alcohol consumed in this country exceed that which, with equable distribution and consumption, may with advantage be taken? The question is one to which it is difficult to give an answer, but the reply will probably be in the affirmative. The proportion of the population by whom alcohol can, on the widest theory, be needed, is certainly a minority of the whole, and it must be remembered that the larger the total quantity of alcohol consumed the larger will be the inequality of its consumption and the greater the amount of individual excess. Injurious excess and drunkenness are, it cannot be too constantly remembered, by no means convertible terms, or to be taken as measures the one of the other. But there is no doubt that actual drunkenness is, if not the graver evil of the two, at any rate that from which emancipation is the less easy.

Restriction on the hours and places for the sale of alcohol is probably the only means at present available for limiting its consumption, and we agree with the speakers at the Rhyl conference the other day, that the failure of Sir HARCOURT JOHNSTONE'S attempt to fix a maximum proportion between the number of public-houses and population is to be regretted. It is certainly desirable that the grocers' licences should be subjected to more efficient scrutiny. Grocers' shops are sources of drink which are free from the social stigma of the public-house, and have probably largely helped women to habits of secret tippling.

THE report which we publish this week presents a grave picture of the water-supply of Hastings. It is evident that both as to quantity and quality the supply is unsatisfactory, and that there is no prospect of improvement except by a complete change in the sources from which the supply is drawn. The water question is beset in Hastings with unusual difficulties. No river runs through the town. It is surrounded by high and steep hills, from which the water flows rapidly; the watershed area is small, the geological formation is unfavourable, and a large portion of the area is too closely populated to be available as a gathering ground. A certain quantity of water of satisfactory quality is obtained from deep wells, but it appears improbable that this supply can be increased to any great extent, and it is not likely to amount to more, at the outside, than 400,000 gallons a day. The rest of the supply is obtained from superficial springs and land drainage stored in open reservoirs, and delivered, partly unfiltered and partly after filtration, through beds which are little better than strainers. The streams which feed the reservoirs are dirty, and some are mere ditches, one at least of them receiving a portion of the drainage of a farmyard. Some of the springs rise in cultivated fields, so that it cannot be doubted that a portion of the manure applied to the fields is carried straight into the water-supply. Much of the soil of the district is porous, and faults and fissures abound. Houses, already numerous, are increasing rapidly in some parts, and, as many of them are undrained, there is ground for grave fear that actual human sewage does now, or may in future, get into the water. Other possible sources of pollution abound, and, even if the water were good now, it would evidently be liable to become at any time most dangerous. At the time of our Commissioner's visit nearly all the town water was turbid and full of water-fleas, even when drawn from the mains; and although this is no proof of animal contamination, the fact that so much suspended

matter is carried into the supply is alone sufficient to condemn the source under the circumstances known to exist.

The present population of Hastings and St. Leonard's is about 35,000, without counting the autumn visitors, and Hastings is increasing rapidly. The water-supply at present required, reckoning twenty-five gallons per head for 40,000 persons and allowing nothing for increase, is, therefore, 1,000,000 gallons a day. We have seen that less than half of this can be obtained from good wells. The difference can only be made up from polluted or suspicious sources. As houses increase, these sources must become more polluted or at any rate more suspicious. Every year will augment the risk, and if the present system be continued, it is but too likely that some serious epidemic will before long open the eyes of the inhabitants. The present consumption is far less than the quantity named above, and many houses are not as yet supplied at all. But undue economy in water, especially at a health resort, is the worst kind of economy, and can only be justified by the most urgent necessity. It will be pretty generally allowed that the quantity we have indicated is the *minimum* that ought to be used, or, at any rate, provided, in a town like Hastings; so that the authorities seem reduced to this dilemma, that either they must be content with a very insufficient and decreasing water-supply, or they must issue an even larger quantity than they do now of flood-water, bad to begin with, and not improved by long storage in open reservoirs. In other words, the water-supply must be small or bad.

The facts which we have thus summarised point plainly to the necessity for some prompt and vigorous action on the part of the town authorities. The timid measures of reform, the slight and slow improvements which are apt to find most favour with municipal bodies cannot, we fear, meet the difficulties of the case. It seems but too plain that the present water-supply is neither good enough nor abundant enough to provide for the present, and still less for the future, wants of the town. To spend more money on the present works would, it appears to us, be simply to throw good money after bad, and the town would be infinitely wiser to consider at once the possibility of obtaining a plentiful and satisfactory supply from a distance. Many places have been suggested from which good and abundant water might be procured. Mr. TOPLEY gives a kind of provisional preference to Glynde, which is rather more than twenty miles from Hastings. He believes that a very large supply might here be obtained from the Lower Greensand. Such water would be as soft as that now used in the town, and perfectly free from suspicion. The expense would no doubt be great with this, as with any sufficiently comprehensive scheme, but the engineering difficulties could hardly be serious, and the cost could be counted pretty accurately at starting. Sooner or later something of the kind must be done, and it would certainly appear to be better to make an effort and get either this or some other scheme carried out at once than to wait until the town has suffered seriously in public estimation.

We shall watch the action of the Town Council with anxiety, and hope we may have the pleasure of recording before long that a grave stigma is about to be removed from one of the most charming English seaside towns.

Annotations.

"Ne quid nimis."

THE PUBLIC HEALTH IN THE FIRST THREE MONTHS OF 1876.

THE Registrar-General has just issued his bulletin upon the public health during the first three months of this year, which may be pronounced as more satisfactory than might have been expected considering the frequent and sudden alternations of temperature for which the past winter was remarkable. Although there were three cold periods during the first quarter of the year, the aggregate amount of the cold was below the average; the lowest reading of the thermometer fell below freezing-point on 37 out of the 91 days of the quarter, averaged 5° of frost, and showed in the aggregate 181. The mortality of the winter is in the main governed by the amount of frost, just as that of summer is governed by the aggregate heat of the season. In the first three months of this year an unprecedentedly high birth-rate, and a death-rate considerably below the average, caused an unusually large natural increase of population by excess of births over deaths; this increase in England and Wales in the three months ending March last amounted to 87,713, whereas in the corresponding periods of 1874 and 1875 the excess of births over deaths was but 77,909 and 52,737. The price of both wheat and coals was low, and of meat slightly lower, although that of mutton exceeded the price in the first quarter of 1875 by a penny a pound.

The annual death-rate in the quarter was equal to 23·5 per 1000 of the estimated population, which was 1·1 below the average rate in the preceding corresponding quarters, and no less than 4 per 1000 lower than the rate which prevailed in the first quarter of 1875. Among the most favourable features in the mortality statistics of the quarter may be noticed the few fatal cases of small-pox, and the continued decline in the death-rate from fever. In the whole of England and Wales only 262 deaths were referred to small-pox, of which 209 occurred in Lancashire. These 209 in Lancashire included 169 in and around Manchester and Salford, and 20 in Liverpool. As evidence of past or present neglect of vaccination in Manchester and Salford, it is pointed out that 33 of the 46 fatal cases of small-pox recorded in the Monsall Fever Hospital were unvaccinated, while six of the 13 others only bore one scar. The annual death-rate from fever in the whole of England and Wales during the quarter was 0·45 per 1000; whereas in the corresponding period of the six years, 1870—5, it had steadily declined from 0·75, and averaged 0·63. The county death-rates from fever last quarter ranged from 0·13 in Bedfordshire, to 0·81 in Lancashire. The Registrar-General calls especial attention to the evidence of the insanitary condition of Lancashire afforded by recent mortality statistics of that county, to which we shall again have occasion to refer. The general features of the present return show plainly that there is an average improvement in the sanitary condition of the English population, while it is as evident that this improvement is unequal, and in some localities altogether wanting.

GUY'S HOSPITAL BIENNIAL FESTIVAL.

THIS biennial gathering of the past and present students of Guy's Hospital took place at Willis's Rooms on Friday, the 5th inst.; Dr. Wilks in the chair. Over 270 sat down to dinner, including Lord Lawrence and Mr. Thos. Turner the president and treasurer of the hospital; the president of the College of Physicians, Dr. Risdon Bennett, and the

president of the College of Surgeons, Sir James Paget, were amongst the guests. The evening was a very successful one. The Chairman, in giving the toast of the evening, "Prosperity to the School of Medicine and Surgery attached to Guy's Hospital," referred in well-chosen terms to the great names of the past which were associated with Guy's, and said that one of the proudest moments of his life was on the occasion on which he pointed out to Virchow, the pathologist and statesman, when showing him over the museum at Guy's Hospital, "the original preparations of Bright's disease, the original preparations of Addison's disease, and the original preparations of Hodgkin's disease." Not only had Guy's been in the van of medical science, but that hospital had produced men who were the very pioneers of new discoveries and fresh knowledge. The toast of the Universities and Colleges, proposed by Mr. Turner, was responded to by Dr. Risdon Bennett and Sir James Paget, who were received with enthusiasm, which was even heightened when Sir James, in his reply, admitted his preponderating attachment to the rival institution and his "bitter disappointment" on all those occasions when Guy's beat St. Bartholomew's. The health of the chairman was proposed by Mr. Hilton, and Dr. Rees, Dr. Habershon, and Mr. Cooper Forster responded to the toasts of the consulting staff and the acting staff of the hospital and lecturers in the school; while Sir William Gull, in his usual telling manner, proposed the "Past and Present Students," coupled with the names of Dr. Lloyd for the past students, and Messrs. H. N. Smith (the house-physician) and Mr. C. T. Symonds (the house-surgeon) for the present students. Mr. Durham responded to the toast of the "Honorary Secretary," and the proceedings, which were considerably enlivened by members of the Guy's Glee Club, terminated.

THE "PROS" AND "CONS" OF A SEA VOYAGE.

THE ingredients of a prescription are assumed to be, and certainly always should be, well known to the prescriber. We take it, however, that a large proportion of those practitioners who prescribe a sea voyage for this or that patient are not at all familiar with the vast variety of material that goes to make up the mixture. It matters not whether the invalid be ordered to America, Australia, Egypt, the Cape, or Madeira, whether he travel by steam or sailing ship, whether or not he be affected with sea-sickness, there are, common to all sorts of water travel, little peculiarities, regarded by most as huge discomforts, that the uninitiated dream not of. The favourable side of the subject is familiar to all. Quiet, rest, regular hours, pure air, salt-water baths, a genial climate, with abundant food, are a summary of advantages offered to the sick man who seeks to recruit health by a sea voyage. The recommendations are to a certain extent genuine, but must be taken with several grains of salt. And the qualifying circumstances are tolerably constant, exist to a greater or less extent in all lines of ships, and are in some cases unavoidable. Fresh air, for example, is quoted as an inestimable advantage in sea travel. But, until the ventilation of passenger ships is far more studied than at present, the passenger has, perforce, whenever a gale is blowing, or decks are being washed, to live in an atmosphere quite as close and unhealthy as that of a crowded ball-room, and this sometimes for several days together. If a steamship be chosen, the change of climate consequent upon rapid travelling is trying, and sometimes dangerous, and in a sailing vessel the delays that arise on account of light or foul winds are often equally detrimental to comfort. The evenings in a tropical sea are often intensely hot and the early mornings chilly, so that sleeping on deck is, as a rule, an unwise proceeding. But the traveller is compelled to pass the night below in a superlatively stuffy atmosphere, the transition from which to that on the deck above is often too marked and too sudden to be otherwise than provocative of catarrh and some revival of an old chest affection. It is, as we believe, quite as difficult for the invalid to clothe cleverly on board ship as in England, and this is saying a great deal. There is (partly perhaps from *ennui*) a constant pulling out of portmanteaus, warm garments being wanted one day, airy costumes the next, and so on; so that, in spite of the *dolce far niente* theory, a great deal of anxious thought, and many minutes out of the twenty-four hours, are consumed in questions of raiment. What we shall eat and what we shall drink are two other very important matters. On all good passenger ships the fare provided is always ample in quantity, and as a rule satisfactory in quality. Breakfast at half-past eight, luncheon at one, and dinner at six o'clock form the *rôle* of meals, supplemented by coffee in the early morning and evening. The wines and other drinks provided are neither better nor worse than those obtainable at an ordinary hotel in England, and ice is nearly always carried. In spite, however, of the abundance of fresh meat and bread, both very good and wholesome, invalids and convalescents, if the passage extends over ten days or a fortnight, invariably complain of a monotony, and a so-called "ship" flavour in the food served to them—in the presence, too, of a very fair appetite. Condensed water is commonly used in steamships, and is unpalatable to many people, as there is usually little opportunity for its proper aeration before drinking. And the difficulty that always exists to some extent of obtaining sufficient exercise is of itself an unfavourable circumstance. And, lastly, there is the natural antipathy (common to so many Englishmen) to the constant company of strangers. Unless your patient is blessed with a tolerably good income, he cannot afford to pay for three or four berths in order to secure a cabin for himself, and so must always run the risk of being quartered with two or three other travellers whose personal habits may be peculiar and not always pleasant. A restless man above or a noisy man below you, a person who is in and out of the cabin at all times of the night, and insists upon lighting his pipe just outside your door, are decided but unavoidable nuisances afloat. It may be argued by some that invalids, in common with other people, must meet with inconveniences everywhere, and if not prepared to put up with them had better stay at home. But it should be remembered that on board ship we cannot, if so disposed, move to other quarters, and there can be no doubt that very few of us who want change and rest will, under any circumstances, be really comfortable afloat for more than five or six days, putting aside altogether the miseries of sea-sickness. It is therefore advisable, and, as we think, not a work of supererogation, to remind our readers that, even in these days of indiscriminate travel, much careful judgment should be exercised before the patient is advised to go to any place necessitating a long sea voyage, however freely convinced the consultant may be that sea air, salt water, and a temperate climate are likely to cure his patient.

TRAINING SCHOOL AND HOME FOR NURSES.

THE Nurses' Home at Westminster, in which the late Lady Augusta Stanley took so lively an interest, is likely soon to be established on a wider basis than heretofore. Lord Hatherley, whose charitable work among the poor has never stopped (not even during his tenure of the office of Lord High Chancellor), has suggested that the new home should take the form of a memorial to the deceased lady who so interested herself in its welfare, and there can be no doubt that a suggestion coming from such a quarter will meet with a ready and liberal response. The

committee wish to raise a sum of £12,000 for the building of a suitable house as a home, it being very justly urged that if the right sort of women are to be attracted towards the work of nursing, a suitable home must be provided for them while they are "walking the hospitals" and receiving the necessary training. The time is not far distant when the amateur nurse will cease to be a fussy nuisance in the sick room, and it is not difficult to foresee that a trained nurse will soon be considered as essential as the medical man by the bedside of the sick. Instead of the present keen competition for nurses we may expect before long to find nurses "waiting for patients," like many of their brethren in the higher walks of medicine. We think that too much stress is being laid upon the importance of attracting "ladies of the highest culture" towards nursing. It will not do to be sentimental on a point of this kind, and there can be no doubt that much of the work which a nurse ought at all times to be ready to do for her patient is disgusting and loathsome, and such as no one would perform except from a high sense of duty. The thorough performance of what we may call the dirty work of the sick-room is of the first importance, and makes the difference between life and death, between a whole skin and the most dangerous bed-sores. Ladies and others who are thinking of joining the guild of nurses should thoroughly understand these points, and those, too, who are instrumental in establishing "Homes" and similar institutions should, we think, be chary of choosing their workers entirely from what are known as "the better classes." A lady is not so likely to perform "dirty work" so thoroughly as a woman who has been used to "dirty work" all her life, and every woman who is thinking of becoming a nurse should rightly understand that the work of a nurse is twofold. One part requires high intelligence, gentleness, kindness, and culture; the other part, which is no less essential, consists in the patient and conscientious performance of much drudgery which cannot but prove repugnant in proportion to the culture of the performer.

SMALL-POX AT THE SEAMEN'S HOSPITAL.

AN important statement was made last Saturday at the meeting of the Metropolitan Asylums Board by Mr. Shaw Stewart, the Chairman of the Stockwell Fever Hospital and Small-pox Asylum, that a patient in the latter asylum had stated that he had lately come from the Seamen's Hospital, Greenwich, where he stayed seventeen days. Two days after he was admitted to the Seamen's Hospital he came out in an eruption, and was kept there fifteen days after. Since the man had been at Stockwell seven other men who had been patients in the Seamen's Hospital had been admitted to Stockwell suffering from small-pox. Mr. Stewart observed that no more certain means of spreading small-pox could be taken than to keep a man suffering from the disease in a place where seamen of all nations were gathered. He moved that the matter should be reported to the Local Government Board, in order that the officials of the central authority might make inquiry into the matter. Dr. Bridges, of the Local Government Board, said the subject should be reported. It is much to be regretted that Mr. Shaw Stewart, before making this statement, did not make inquiries as to the particulars that led to the man's retention at the Seamen's Hospital; had he done so, he would have learnt that the hospital authorities had really very little choice in the matter. The facts are briefly these:—On April 3rd a patient was brought from the Sailors' Home, Limehouse, having a temperature of 105·4°, no rash, but considerable bronchitis. As several cases of measles had been brought from the Sailors' Home during the previous week, it was naturally supposed that this case was of the same nature. As, however, no rash had developed, the patient was placed in a separate ward, distinct from the other wards. Forty-eight hours after admission no doubt could exist as to the nature of the malady, but the severity of the case was such, accompanied as it was with extreme bronchitis, and possibly pneumonia, that it was judged absolutely impossible to remove the patient without risking his life. This opinion was arrived at not solely by the physician in actual attendance on the case, but also by his colleagues.

We have always advocated the prompt removal of all infectious cases from the wards of a general hospital, but of course such a procedure could not be carried out in exceptionally severe cases, such as this evidently was. Moreover, it must be borne in mind that the Seamen's Hospital is not circumstanced like the metropolitan hospitals, in which cases are brought from adjacent parishes or districts, but their cases are usually conveyed a considerable distance, after exposure to cold and extreme vicissitudes, and often arrive in a state of great exhaustion, and require immediate attention and treatment.

QUALIFICATION FOR VACCINATION APPOINTMENTS.

THE Royal College of Physicians has issued the following regulation, which will come into force on October 1st next, and has requested the attention of all medical schools to it:—

"That every candidate for the College licence be required to produce a certificate of having acquired proficiency in vaccination, signed by a teacher of vaccination appointed or recognised by the Local Government Board."

The regulation is a very proper one. It had its origin, we believe, in the refusal of the Local Government Board to recognise the certificate of proficiency in vaccination of one of the licentiates of the College on the ground that it was not obtained from a teacher or examiner in vaccination appointed or recognised by the Board. The Board is properly particular in this matter, and considers that only the London University, among licensing bodies, at present exacts such special teaching in the matter of vaccination as the Board requires. The Board would not hesitate to recognise vaccination teaching at hospitals provided that there was a vaccination station established fulfilling these two conditions, that the teacher of vaccination is not liable to frequent change, and that ample means of seeing vaccination (such as eight or ten cases weekly would afford) exist. Practically no English hospital has such means of teaching vaccination. The Royal Infirmary of Glasgow and the Royal Dispensary of Edinburgh have them, and are duly recognised by the Local Government Board. Undoubtedly bad vaccination brings scandal upon the Vaccination Acts. And the Board is justified in seeing that the art of vaccinating well is duly taught.

KNIGHTSBRIDGE BARRACKS.

LORD POWERSCOURT, in a letter to *The Times* of Wednesday last, points out the defects in the plans for the new barracks at Knightsbridge. These defects, however, as we have always insisted, are the natural consequence of the inconveniently-shaped site on which the barracks are erected. The improvements suggested by Lord Powerscourt would certainly make the most of this contracted space, but even then it would be insufficient for the proper fulfilment of modern architectural and sanitary requirements. We thank Lord Powerscourt for expressing in outspoken terms his detestation of the system of driving the married soldier into "wretched lodgings" in the slums near the barracks. We quite agree with him that such a course

drags down "many a smart soldier and his family to misery, disease, and death." If decent accommodation for the married soldier has been disregarded, such has not been the case with the stable requirements of the officers, for Lord Powerscourt says that "the space now occupied by the officers' stables, which is already too large for the purpose when taken in comparison with the spaces allotted to other purposes of the regiment, is still to be kept for that purpose only." Moreover, the building now occupied by the infirmary stables and forge is to be converted into additional accommodation for the officers! The present Government are eminently unlucky in their architectural and sanitary schemes. The offices recently erected at Whitehall under the auspices of the Board of Trade show neglect of ordinary sanitary precautions; whilst the new barracks at Knightsbridge seem to be erected for the sole purpose of improving the accommodation for the officers, without any consideration of the military and sanitary requirements of the regiment generally.

THE PROPORTION OF MEDICAL MEN TO POPULATION.

IT has been frequently asserted that one of the main causes of difficulty with which the Government has to contend at the present time in obtaining candidates for the public medical services arises from what would apparently be opposed to general belief—viz., the relative scarcity of medical men. No doubt a spirit of distrust has grown up in regard to the Government services; still there seems to be some ground for this statement. Dr. William Farr, for example, in a recently published letter addressed to the Registrar-General on the mortality in the registration districts of England, calls attention to this subject. Dr. Farr says that the people in this country get a better supply of medical attendance than the people of any other country, but it is still imperfect. Some die in illnesses without medical aid, and in parts of the country even medical certificates of the cause of death are not given in all cases because the deceased has been seen in his last sickness by no qualified medical practitioner. The Poor Law provides medical relief for paupers, but the classes above them trust to quacks, or do not call in aid for fear of medical bills at a time when the head of the family may be earning nothing. In the army, Dr. Farr adds, there is one surgeon to every 202 men; in the general population one medical practitioner only to every 1276 men, women, and children living. At the Census of 1871 the physicians and surgeons enumerated were 14,684, assistants and medical students over twenty years of age 3116. The proportion of medical men to the population has declined since 1851, when it was 9·7 per 10,000 living, to 8·3 in 1861, and to 7·8 in 1871.

FINANCES OF THE GENERAL MEDICAL COUNCIL.

THE forty-fourth section of the Medical Act requires the Medical Council to make returns to both Houses of Parliament of the receipts and the expenditure of the General Medical Council and of the respective Branch Councils. The return is published, with the Register, annually. The figures, and the facts they represent, are not without interest to the profession. An analysis of these returns for the past five years shows that in the five years the Council has received £28,266 5s., or an average annual income of £5653 5s. The income of the Council in the past year has been £8085 12s. 10d. The chief sources of income are the fees which accrue from the registration of practitioners. Those who were qualified before the passing of the Medical Act pay a registration fee of £2. Those who have been qualified since pay a fee of £5. The latter, of course, are the great majority, and are the principal supporters of the Council. In the past five years no less than 4269 new practitioners have been added to the Register, paying £5 each, giving an average of 853 a year. There has been no falling off of new practitioners in the past year, 912 having been newly registered—viz., 584 in England, 177 in Scotland, and 151 in Ireland. In the five years, 150 practitioners qualified before the passing of the Act have been registered on payment of a fee of £2, of whom 23 were registered in the last year. Of late years many practitioners have seen the advantage of registration. Indeed, for all legal purposes it is indispensable. The sale of the Pharmacopœia in five years has yielded £1508 12s. 11d. As the printing of it costs £714 19s., the work has been the source of profit to the Council of nearly £800. The interest received from investments in the five years amounts to the sum of £4222 16s. 6d. The chief items of expenditure are fees of members and the fees of visitors of examinations. The fees and travelling expenses of members of Council for the five years reach £8355; for last year, £1570 16s. The expenses of the Visitation of Examinations in the last year were £718 4s.; a sum well spent, probably, but the expenditure of which should not be necessary if the system of examination were different. In the five years the Council has received only £64 10s. 7d. in the form of penalties for breaches of the Medical Act. It takes no penal measures against those using titles which imply registration.

HEALTH OF THE ARMY.

FROM the statistical section of the Army Medical Report, just published, we gather that the average strength of the troops serving in the United Kingdom during the fifty-two weeks ending Dec. 25th, 1874, was 86,837. The admissions into hospital of this number were 73,004; the deaths amounted to 735; and the average number of men always in hospital was 3351. The proportions per 1000 of the strength represented by these numbers are—of admissions, 840·7; and of constantly sick, 38·59. In addition, 84 deaths occurred among men detached from their regiments, the average number of men so detached being 6361, as given by the Adjutant-General's returns. The average strength of the force serving in the United Kingdom was therefore 93,198, and the total number of deaths 819; being in the ratio of 8·79 per 1000 of the strength. The rate of admissions is 81·5, and that of the deaths ·53, per 1000 men in excess of the rates of the previous year.

THE OBSTETRICAL SOCIETY'S CONVERSAZIONE.

ON Wednesday night last, the Obstetrical Society of London held a brilliant Conversazione at the Royal College of Physicians, under the presidency of Dr. Priestley. Thanks to the energy of the two honorary secretaries, Dr. Wiltshire and Dr. Arthur Edis, everything calculated to ensure success had been carefully arranged. The company was numerous, and comprised all grades of medical men, as well as several members of other professions. The College of Physicians and the College of Surgeons were largely represented, although Sir James Paget was unfortunately unable to be present, and there was a large sprinkling of general practitioners and of foreigners and strangers. An unmistakable political feeling prevailed, and it was whispered that several of the leading men in the profession had made a special point of being present at the gathering as a mark of approval of the recent spirited resignation of the examiners in obstetrics at the Royal College of Surgeons. For the rest, suffice it that a valuable collection of pictures, works of art, and scientific

instruments, especially of obstetrical and gynæcological instruments, and the lively strains of Mr. D. Godfrey's excellent band, served to enhance the interest and pleasure of the whole.

COMPULSORY INFORMATION FROM MEDICAL MEN.

AT a meeting of the medical men of Huddersfield, Mr. G. W. Rhodes in the chair, to consider a clause in the Huddersfield Bill, now before the House of Commons, making it obligatory, under penalty, on every medical man in the borough to give information to the sanitary official of certain kinds of infectious diseases which might come under his care, the following resolutions were passed:—

Moved by Dr. Cameron, and seconded by Mr. Knaggs—

"That in the opinion of this meeting, after having heard Mr. Batley's [the Town Clerk's] letter read, the terms of the resolutions passed at our last meeting* are by no means too strong, and this meeting affirms that medical men object on principle to being obliged to inform against any of their patients, whether their rental be above or below the sum of £10. This meeting is of opinion that in this matter there should not be one law for the rich and another for the poor."

Proposed by Mr. Hall and seconded by Dr. Wilson—

"That this meeting is of opinion, that while medical men will be always willing to advise the householder in whose house a case of infectious disease may occur as to the best means of preventing the spread of the disease, and even to advise him to communicate with the sanitary authority; they nevertheless consider it oppressive, unnecessary, and unjust that it should be made a penal offence for a medical man to fail to report the existence of infection."

Moved by Mr. Brewer and seconded by Mr. Ellerton—

"That this meeting considers such a clause as the one proposed, to compel medical men to report all cases of infectious disease, would defeat its own purpose, for many cases of infectious disease, considered by the friends of the patients as slight in their nature or doubtful in their character, would, in consequence, never come under the cognisance of the profession, and either not be treated at all or treated by unqualified practitioners, who would not be compelled to report such cases, and thus the spread of such diseases would be increased rather than diminished."

Moved by Dr. Lowson and seconded by Mr. Irvine—

"That a copy of the foregoing resolutions be forwarded to the Town Clerk, and that they be handed to the papers for publication."

We entirely concur with the action taken by the profession in Huddersfield with reference to the very crude provisions in the Bill to which the resolutions refer.

THE BALHAM MYSTERY.

AN illustration of the careless way in which writers in the daily press deal with subjects involving some acquaintance with medical matters may be found in a leading article published by a contemporary on the 10th inst. After describing the recent tragic occurrence at Balham (we shall next week give a full account of the medical history of the case), it goes on to say that "until Sir William Gull was called in there was no suspicion that the unfortunate gentleman had taken poison, and, in all probability, if Mr. Bravo had not been in a position which, happily for the interests of justice, enabled his friends to summon the best advice in London, his death would have been ascribed to dysentery, or, if it had taken place in summer time, to some form of cholera; and no inquest would ever have been held." In another part of the paper in which an account of the affair is given it is correctly stated that the medical gentlemen who saw the poisoned man in the first instance "were satisfied that he had imbibed some metallic irritant." When we state that one of the physicians in attendance soon after the seizure was Dr. George Johnson our medical readers must smile at the assertion that the cause of illness was not suspected until after the arrival of Sir W. Gull, who did not make his appearance for some hours afterwards. We feel sure that Sir W. Gull will be the first to repudiate any such claim as that put forward by our contemporary.

* See THE LANCET, April 15th.

A NEW METHOD OF DETERMINING THE AMOUNT OF FREE OXYGEN IN THE URINE.

DR. FREISE (*Comptes Rend.*, 81, p. 229) suggests a new method of ascertaining the amount of oxygen in the urine, which rests on the absorption of this gas by pyrogallic acid in an ammoniacal solution. A solution of this acid is added to the urine to be tested, and the mixture is preserved from the action of the air by a layer of turpentine; ammonia is then added, and the fluid is immediately rendered brown by the oxidation of the pyrogallic acid. It is again rendered colourless by the addition of a solution of zinc chloride. The quantity of the zinc chloride required constitutes a measure of the quantity of the oxidised pyrogallic acid. The zinc chloride solution contains 1·4 grammes of zinc in 100 ccm. This quantity corresponds to 2 milligrammes of pyrogallic acid. For the estimation of the oxygen, Freise depends on an experiment of Döbereiner, according to which 1 gramme of pyrogallic acid in an ammoniacal solution absorbs 200 ccm. of oxygen.

HEALTH OF TENBY.

WE have received several communications from residents in this watering-place in which the writers take exception to a few observations made in our issue of the 22nd of April, respecting the drainage and sewerage of the town. Our remarks were based on a report recently issued by the medical officer of health, and the passage which our correspondents are anxious to qualify was simply a quotation from the report, and placed in inverted commas. As, however, it seems to be considered that the paragraph may prove prejudicial to the prosperity of the town in the coming season, we will endeavour to remove any injurious impression created by its publication in our columns. Dr. D. A. Reid, in a letter to the *Tenby Observer*, deals with the questions at issue in a manner which must reassure his readers of the efficiency of the provision made in respect of drainage and ventilation of sewers. One great fact, however, in testimony of the salubrity of Tenby, and one which must convince every one, is that the death-rate is only 10 per thousand annually, as shown by Dr. Reid. It is rarely that a mortality so extremely low is reported in a town with a population, including residents and visitors, of 6000. That Tenby possesses unsurpassed natural advantages is manifest.

THE NEW ARMY MEDICAL SERVICE BLUE-BOOK.

THE Army Medical Report for the year 1874 has just made its appearance. As it follows so rapidly on the heels of its predecessor it may be assumed that it has been published from a desire to bring up these Reports to the latest dates practicable, instead of allowing them to lag behind until the events to which they refer have passed out of mind. The blue-book of 1874 offers, in point of size, a contrast with the rest of the series, being by far the smallest. We notice that all the figures and tables, which used to form so large a portion of the statistical matter in the appendix, have been dispensed with in the present volume, which has in other respects also been much reduced by

other omissions. In addition to the usual statistical, sanitary, and medical reports, drawn up by the officers in charge of the respective branches, there are a few papers in the appendix, the first of which, by Surgeon Evatt, M.D., is an uncommonly interesting and freshly-written contribution. It is a topographical account of the Persian Gulf and valley of the Euphrates and Tigris. As this subject possesses a good deal of what may be termed politico-medical interest at the present time, we shall take another opportunity of considering it more in detail. Surgeon-Major Roberts describes a case of aneurism, in which the external iliac artery was tied successfully, and Surgeon-Major Porter contributes some papers and cases founded on his experience in the surgical wards of Netley.

MR. JOHN SIMON, D.C.L., F.R.S.

HER MAJESTY has been pleased to confer upon Mr. John Simon, the Medical Officer of the Privy Council Office and of the Local Government Board, a Companionship of the Civil division of the Order of the Bath. It is to be presumed that this is the first step to making Mr. Simon a Knight Companion of the Order, as this honour, although a very insufficient acknowledgment of Mr. Simon's great services to the State over a period of twenty years, is perhaps the one, as English honours go, best fitted to the circumstances of his case. It may be anticipated that the Minister who uttered as a political maxim the apophthegm *Sanitas sanitatum, omnia sanitas*, will be eager to do honour to the chief exponent of sanitary science in the British Empire on the occasion of his resignation of the important post he has so long held.

THE ALEXANDER PRIZE.

SURGEON-MAJOR PORTER, Assistant Professor of Military Surgery, Netley, has been awarded the Alexander Memorial Prize and Gold Medal for his essay on "The Various Forms of Stricture of the Urethra; their Causes, Consequences, and Treatment."

The subject announced by the Committee for the next prize and gold medal is for the best essay on "The Influence of Drinking-water in originating or propagating Enteric Fever, Diarrhœa, Dysentery, or Cholera; to be illustrated, as far as possible, by instances which have come under the personal observation of the author."

The competition is limited to the executive medical officers of the army on full pay; and essays are to be dispatched to the President, Alexander Memorial Fund Committee, on or before the 31st December, 1878.

LINGUAL PSORIASIS AND EPITHELIOMA.

SIR JAMES PAGET pointed out, in some remarks at a meeting of the Medical and Chirurgical Society in 1864, that lingual psoriasis may terminate in epithelioma. This observation was confirmed by Mr. Hulke, Mr. Morris, and M. Trélat last year, and more recently by M. Fredet, who described a well-marked case to the Société de Chirurgie of Paris. The patient was a man of fifty years of age, a great smoker, on whose tongue patches of psoriasis appeared, followed after a time by induration and well-marked epithelioma, to which, an operation being refused, the patient ultimately succumbed.

DINNER TO SIR JOSEPH FAYRER.

WE have much pleasure in announcing that Sir Joseph Fayrer's friends of the Indian Medical Service have invited him to dine with them at St. James's Hall on the 24th May, at 7.30 P.M. Those desiring to be present on that occasion may obtain tickets from the Manager, St. James's Hall.

The selection of Sir Joseph Fayrer to accompany the Prince of Wales in his Eastern tour may be very properly regarded as a compliment to the Indian Medical Service, in which the best years of his life have been spent, and with which his name, reputation, and interests are so closely identified. The post Sir Joseph Fayrer lately filled involved great responsibility and anxiety, and required no little tact, delicacy, and decision of character. His Royal Highness returns to these shores in better health than he left them, and his Eastern tour has been an immense success, and we heartily join Sir Joseph Fayrer's friends in their congratulations and welcome.

THE ceremony of laying the foundation-stone of the new building to be added to the Royal College of Surgeons, Dublin, was performed by his Grace the Lord-Lieutenant in the presence of a numerous and distinguished assembly. Dr. Edward Hamilton, President of the College, after giving a succinct review of the history of the institution, dwelt with some force upon the alleged grievances of medical officers of the army. "We would," said Dr. Hamilton, "raise the voice of warning that, with the Irish surgeon, no tempting offer of more money will ever outweigh a degraded position or diminished prestige. We want fixity of tenure. We want that Warrants once signed by Her Gracious Majesty shall not be altered to the prejudice of those who accepted service under them. We would ask that members of a learned profession should be relieved from duties which appertain to the orderly or the purveyor's clerk. We would ask that when the medical officer becomes broken down by overwork, by climate, or disease, his sick-leave shall be more assimilated to that of his combatant brethren in the service." The *Dublin Evening Mail* trusts that these claims for the surgeon put forward on an occasion so auspicious, and in the presence of the Viceroy, will not fail to make their just impression.

THE Report of the Manchester and Salford Provident Dispensaries Association for the past year has reached us. The Council have every reason to be satisfied with the results of their labour in the period. It was feared that a considerable time would elapse before the working classes would connect themselves with the movement. The system, however, is becoming gradually known and appreciated, and the promoters hope that before the three years for which the guarantee fund was formed have expired, the seven dispensaries now in operation will have become self-supporting. Within the last few months over 20,000 members have been enrolled. A promise is made that if it should appear with more extended experience that some modification in the working of the scheme may be desirable in order to secure a larger recompense to the medical attendants, the necessary alterations will be made.

IN the House of Commons, Sir C. Adderley, in reply to a question by Captain Pim, said that the clause of the Merchant Shipping Act, 17th and 18th Vic., providing that every foreign-going ship having 100 persons or more on board should carry a qualified medical man, was by no means a dead-letter. Last October the Board of Trade issued a circular to inquire whether the Act was carried out in this respect, and in the answer to it only four cases of neglect, which had occurred at Liverpool, were reported. Since then inquiries had been made at eighteen of the principal ports of the kingdom, and the result left no room to doubt that the Act was strictly enforced.

THE Registrar-General of Scotland, in his annual report just issued, again urges that the Vaccination Act should be amended so as to reduce the period of six months, during which an infant must be vaccinated, to four months.

WE regret to have to record the death, at Clifton, on the 3rd inst., of Thomas Inman, M.D. Lond., late of Liverpool. The deceased gentleman was consulting physician to the Liverpool Royal Infirmary, lecturer at the Liverpool School of Medicine, late physician to the Northern Hospital, and was at one time president of the Liverpool Literary and Philosophical Society. He was an author of considerable repute, one of his latest works being "A Foundation for a New Theory and Practice of Medicine." In 1869 he published "Ancient Faiths Embodied in Ancient Names," a book that attracted a good deal of criticism. Dr. Inman was held in the highest estimation by the profession and public in Liverpool.

DR. FRANCIS VACHER has just issued his annual report on the health of Birkenhead during 1875. The population of this town is estimated at 54,000, and on this population the birth-rate of the year was equal to 38·3, and the death-rate to 25·2 per 1000. The death-rate was 4 per 1000 higher than in 1874, and 4 per 1000 in excess of the average rate. The 1362 deaths from all causes in 1875 included 394, or 29 per cent. from zymotic diseases. The death-rate from zymotic diseases was equal to 7·3 per 1000, which, the medical officer of health pertinently remarks, "is exceedingly high, even in an urban district, part of which is densely populated." The general increase in the Birkenhead death-rate appears to require investigation.

THE Clothworkers' Company, through Dr. Carr, have presented to the Medical College, Epsom, a Free Medical Scholarship of £50 per annum, tenable for four years, and £50 to start life with on the scholar attaining the usual qualifications to practise medicine. The College already possesses four Free Medical Scholarships of a similar value, which are especially reserved to the Foundationers.

THE town of Oldham has been suffering severely from enteric fever. During the past month 63 cases of the disease were reported, of which number 17 proved fatal. It appears that the outbreak is due to milk-contamination. The dairy-farms of the locality are alleged to be in a very filthy state.

THE rate of mortality in the metropolis last week was 21 per thousand annually. There were registered 1416 deaths, including 2 from small-pox, 53 from measles, 48 from scarlet fever, 5 from diphtheria, 75 from whooping-cough, 16 from different forms of fever, 15 from diarrhœa, and 271 referred to diseases of the respiratory organs.

WE gather that the remaining portion of the Hôtel Dieu of Paris will be pulled down for the pathetic purpose of securing a better view of Nôtre Dame. The new hospital of the Hôtel Dieu will probably be opened early next year.

AT the Harveian Society, on Thursday, the 18th inst., Mr. R. Godlee will read a paper on Antiseptic Surgery.

New Inventions.

NEW ETHER INHALER.

MESSRS. SALT & SON, surgical instrument manufacturers, of Birmingham, send us a description of a new inhaler, devised by Mr. Lawson Tait, and manufactured by them. The advantages claimed for this apparatus are, that pure ether vapour can be given at the temperature of the blood, and unmixed with air, so that the production of anæsthesia is more rapid and agreeable than if induced by ether in the ordinary way; there is also no risk of bronchitis, which is sometimes induced by the intense cold resulting from the vapourisation of ether.

The apparatus, as will be seen by the engraving, is composed of glass and metal, with an elastic tube and vulcanite mouth-piece. The larger glass vessel contains the stock; the smaller one, a small quantity of ether, to be evaporated by immersion in a hot-water bath, the heat being maintained by means of a spirit lamp underneath. The ether is supplied to the smaller vessel by means of a spring pump, which injects from the stock bottle, from time to time, as much as is required, and is entirely under the control of the administrator.

Analytical Records.

FRENCH SOUPS, PREPARED BY THE SOCIÉTÉ GÉNÉRALE DES POTAGES ÉCONOMIQUES, PARIS.

(HENRY A. WOLFF, 40, GREAT TOWER-STREET.)

These soups are sold in the dry state, the *consommé* in tablets, the others either in small grains or in cakes with vegetables. They are wonderfully cheap, and the accounts we have received of their manufacture and rapidly increasing consumption are so interesting that we have thought it right to submit them to a somewhat careful examination. The basis of the soup is meat extract, but the meat is mixed with vegetables during extraction and before concentration. The concentrated extract is either sold in the dry state or is granulated with tapioca, semolina, Italian paste, or wheat flour. It is only necessary to boil one of these preparations with water for a few minutes, and soup of excellent quality is obtained at a cost of not more than 1½*d.* per head. We have analysed several samples, and our results confirm the accuracy of the published statements. The soups are, we think, likely to be very generally useful, particularly in the summer, when all unnecessary cooking should be avoided as much as possible. They are, indeed, sure to be as popular in the kitchen as in the dining-room.

VASELINE (GELATUM PETROLEUM).

(W. MARTINDALE, NEW CAVENDISH-STREET.)

This new remedial agent is offered as a basis for ointments and an emollient application for the skin, and is an American preparation of petroleum, from which the lighter

portions have been separated by distillation, and all taste and smell removed. It is perfectly neutral, does not become rancid on exposure to the air, will not saponify, and, in fact, is only altered with great difficulty by chemical agents. It is very soft, and altogether seems admirably adapted to the purposes for which it is intended. We think it will be very valuable in medical practice, and advise its careful trial.

VIN DE BAUDON, ANTIMONIO PHOSPHATÉ.
(PAGNY AND WALLACE, FINSBURY PAVEMENT.)

This preparation comes attested by the names of several distinguished French physicians and surgeons. The wine contains antimony and phosphates, and is recommended as a substitute for cod-liver oil in pulmonary and other complaints.

NEWMAN'S IMPROVED PURE EXTRACT OF MALT.

This is quite correctly described on the label. It is a very good preparation, somewhat thinner than some we have analysed. It renders starch soluble in a short time, is very slightly acid, and has all the other properties of a pure malt extract.

CONDY'S OZONISED SEA SALT.

Sea salt associated with alkaline permanganate. It is intended for use with the bath, and the idea may be commended as very sensible. Condy's fluid is now a well-known toilet luxury.

MEMORIAL TO THE LATE DR. PARKES, F.R.S.

At a meeting of Army Medical Officers, held in the Mess-room at Netley, 20th April, 1876, the Principal Medical Officer in the chair, the following resolutions were unanimously agreed upon:—

1. Proposed by Surgeon-General Longmore, C.B., seconded by Surgeon-General Maclean, C.B.: "That it is desirable to establish a permanent memorial of the late Dr. Parkes, Professor of Hygiene in the Army Medical School."

2. Proposed by Surgeon-Major J. Coates, M.D., seconded by Surgeon-Major G. Pain: "That the memorial consist of a portrait, to be painted by an eminent artist, which should be placed in the Mess-room of the Head-Quarters of the Army Medical Department, whether at Netley or elsewhere; and of a replica of the bust of Dr. Parkes now at University College, to be placed in the Lecture-room of the Army Medical School; and, further, if the fund collected admit of it, the foundation of a Parkes Scholarship, or Prize, to be competed for in the Army Medical School."

3. Proposed by Surgeon-Major J. H. Porter, seconded by Surgeon J. O'Reilly, M.B.: "That all Medical Officers in the Army, Naval, and Indian Public Services be requested to subscribe; and that contributions be also received from any other friends and admirers of Dr. Parkes, who may wish to join in the memorial."

4. Proposed by Surgeon-Major D. Cullen, seconded by Surgeon-Major Rattray, M.D.: "That the subscription from Officers be limited to one day's pay."

5. Proposed by Surgeon-Major J. Coates, M.D., seconded by Surgeon-Major W. M. Webb: "That the following gentlemen be appointed to act as a local Committee to carry out the objects of the meeting:—President: Surgeon-General Longmore, C.B. Members: Surgeon-General Maclean, C.B.; Deputy-Inspector General J. D. Macdonald, F.R.S., R.N.; Surgeon-Major J. Coates, M.D.; Surgeon-Major J. H. Porter; Surgeon-Major W. M. Webb; Surgeon-Major D. Cullen, M.D.; Surgeon-Major C. Rattray, M.D.; Surgeon-Major W. Cherry; Surgeon-Major F. Welch; Surgeon A. B. Robinson; Surgeon J. O'Reilly, M.B.; Dr. Aitken, F.R.S.; Surgeon-Major C. D. Madden; Surgeon-Major G. Pain; Surgeon-Major T. M. Bleckley, M.D., C.B.; Staff-Surgeon W. F. C. Bartlett, R.N.; Surgeon-Major R. Waters, M.D.; Surgeon-Major T. W. Wright; Surgeon-Major S. G. White, M.D.; Surgeon J. Fleming, M.D.; Surgeon R. Bowman, H.M.'s Indian Medical Service; Surgeon A. S. Lethbridge, H.M.'s Indian Medical Service. Treasurer: Surgeon-Major F. S. B. F. De Chaumont, M.D. Secretary: Surgeon G. E. Dobson, M.B."

ROYAL COLLEGE OF SURGEONS.

A meeting of the Council of the College was held on Thursday last. A letter was read from the Deputy Vice-Chancellor of the University of Cambridge, stating that the Syndicate appointed to take into consideration the proposed Conjoint Scheme were not prepared to recommend its acceptance by the University. A letter was read from the Master of the Apothecaries' Society, giving the Society's assent to the Scheme. The Council decided not to take further steps in the matter until they had received answers from the other co-operating authorities, and especially from the College of Physicians.

The subject of the Jacksonian Prize for 1877 will be "The Disease of the Lymphatics known as Hodgkin's Disease—Lymphatinoma."

Other business of a routine character was transacted.

Correspondence.

"Audi alteram partem."

ON THE TREATMENT OF SEVERE SPRAINS.

To the Editor of The Lancet.

Sir,—I am glad to find, from his note in your current number, that my friend Mr. Henry Smith agrees with me in the propriety of treating severe sprains by "compression and perfect immobilization;" but I regret that I cannot concede the claim to priority which he urges on behalf of Mr. Peter Hood. I made no such claim, and it belongs to no living surgeon. The passage I quoted from Velpeau went far to prove this; but I merely adduced it as one of the terse sayings of my old master, ever deserving of remembrance by practical surgeons. The most perfect exposition of the plan of treatment which I advocate is to be found in Seutin.*

Mr. Peter Hood† prescribes leeches, hot fomentations, and hot bread-and-water poultices, to be followed in two or three days by strapping and bandaging, the latter constituting, in his opinion, an innovation in surgical practice. Nearly eighty years ago Baynton wrote: "In many other instances of weakness and lameness which succeed to fractures of the bones and strains of the joints, the adhesive plasters, prepared and applied so as to form bandages, have proved very useful through the support they afford; and I believe it will be generally found that the confinement required in such cases may be considerably diminished, and frequently rendered unnecessary, by their application."‡

However severe a sprain may be, however intense the pain and great the effusion of blood, I never apply leeches or emollients; but at once wrap the part in fine cotton wool, surround the joint with well-softened and bevelled pasteboard splints, and bandage with steady and uniform pressure, following it up with fresh bandaging and firmer pressure as the swelling subsides, which it invariably and rapidly does with commensurate relief of pain. I do not claim that this is new surgery, but sound surgery.§ This subject is especially fruitful in testimony to the truth of Charles Bell's great dictum, that "those who are ignorant of the history of the art, and not aware of the observations and discoveries of the great men who have preceded them, are in continual danger, in striving after new inventions,

* Traité de la Méthode Amovo-inamovible, 2me éd., Bruxelles, 1851, pp. 163-5.

† On the Treatment of Sprained Ankle. London, 1853.

‡ Descriptive Account of a New Method of Treating Old Ulcers of the Legs. By Thomas Baynton, surgeon, of Bristol. Second Edition. Bristol, 1799, p. 134.

§ On the Treatment of Fractures of the Limbs, by Sampson Gamgee (London, Churchill, 1871), p. 153, *et seq.*

of only restoring what has been discovered, tried, and rejected before their time."*

I am, Sir, your obedient servant,

SAMPSON GAMGEE.

Broad-street, Birmingham, May 6th, 1876.

MANIFESTATIONS OF SYPHILIS IN THE TEETH.

To the Editor of THE LANCET.

SIR,—In your notice of the meeting of the Association of Surgeons Practising Dental Surgery your reporter has obviously misunderstood my meaning in the remarks I made. I shall therefore consider it a favour if you will permit me to say that I supported Mr. Napier in hesitating to accept the peculiar lunar notch in the permanent central incisors of the upper jaw as an infallible indication of a syphilitic taint, because I had in so many instances signally failed to arrive at a definite syphilitic history.

I cannot but regard syphilis as a disease more sinned against than sinning, and the gist of my observations was to imply that at the present day there is too great a tendency to assume that syphilis is the *fons et origo* of many of the ills that flesh is heir to.

I further stated that in many so-called syphilitic diseases the history of syphilis is conspicuous by its absence. Thus in numerous instances under my care of ulceration on the face and other parts of the body, especially in the well-known extensive ulceration of the palate with exfoliation of the neighbouring bones (the latter being attributed almost by common consent to syphilis), a syphilitic history is very commonly wanting. Then, with the view of indicating that ulcerations do not so frequently occur as a sequel of syphilis as is generally supposed, I remarked incidentally, *and I gave my individual experience only*, that after about fifteen years of hospital and other practice I could not call to my recollection one single instance in which a patient who had been under my care from the first with an infecting sore, followed by the usual secondary symptoms (such as rubeola, lichen or psoriasis, accompanied, perhaps, by the characteristic crescentic, white, patchy elevations on the soft palate and on other parts of the mouth or throat, or with condylomata—all these points being, as I think, evidence of true syphilis), who had at any time returned to me with ulceration on any part of the body or with exfoliation of the nasal and palate or portions of the superior maxillary bones.

In making the above statement I am sure that no member present at the meeting will charge me with a desire to claim any superior skill in the treatment of my cases; indeed, where I presumptuous enough to do so I should expect and deserve to be assailed with an argument suggested by a friend that I had been so unsuccessful in the treatment of my patients that they had resolved in a body not to come back to me.

Before concluding, I hope you will allow me to add that I think the members of the Association of Surgeons practising Dental Surgery are much to be congratulated on the remarkable success attending the inaugural meeting. The presence of so many distinguished and highly respected members of the profession is a clear proof of the interest taken in an association which has been established in no spirit of hostility or rivalry, but with, as you observe, "an honest intention to improve the status of those practising the specialty of dentistry."

With many apologies for occupying so much of your space, I am, Sir, your obedient servant,

Brook-street, Grosvenor-square, May 6th, 1876. FRANCIS MASON.

MEDICAL DEGREES AT THE UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—Allow me to state a few facts of which many of your readers are ignorant. The regulations for obtaining medical degrees at Oxford and Cambridge differ widely. At the former it is necessary to graduate in arts before commencing medical study; but in the latter, medical study taken out before entering the University is recognised. At Cambridge, a student who has passed the Oxford and Cambridge examination may enter unattached, and, by passing the Natural Sciences Tripos, go up for the M.B. degree in four years, at a rate of expenditure not greater than studying in London for a corresponding period would involve.

At Cambridge there is by no means the scarcity of candidates which is frequently supposed, as the following table for 1875 will show:—

Examination.	Passed.	Rejected.	Total.
First M.B.	26 ...	11 ...	37
Second M.B. ...	16 ...	8 ...	24
Third M.B.....	6 ...	6 ...	12

Few University men will agree with you that it is desirable to give the M.B. degree to second-rate practitioners, or to lower the standard of the examination. I may add that it would be much more to the point if those practitioners who are anxious to obtain a degree would only take the trouble to petition the London University to recognise medical study taken out prior to matriculation.

Apologising for trespassing on your valuable space,

I am, yours, &c.,

24th April, 1876. A CAMBRIDGE GRADUATE (B.A.)

*** We did not say that it was desirable to give the M.B. degree to second-rate *practitioners*. We advocated making that degree pass and honour, which would distinguish between first- and second-rate men. The plan has answered very well with the Theological examinations at Cambridge; it cannot be said that allowing men to enter the Church with an average standard of theology has in any way injured the Universities. As there must be "second-rate men," we think it the more important that they should receive the advantages of a University training; they derive, we believe, greater relative good from such training than the "first-rate man." We do not think making the M.B. equivalent to the examinations at the College of Physicians would be lowering the standard.—ED. L.

BIRMINGHAM.

(*From our own Correspondent.*)

AN adjourned inquiry into the provisions of the Birmingham Improvement Scheme has been held by Mr. J. T. Harrison, C.E., the Inspector of the Local Government Board, and that gentleman, having heard additional evidence as to the sufficiency of the scheme, stated, before closing the inquiry, that he had gone over the unhealthy area pretty closely, and he was quite sure an improvement scheme would be a great advantage to the town.

The want of public mortuaries, to which THE LANCET has on many occasions called attention, and which has been brought under the notice of the Town Council on the special recommendation of more than one coroner's jury, is shortly to be remedied. The Health Committee propose to erect a mortuary at each of the divisional police-stations, and also a central mortuary at the Public Office. They also recommend that the authorities should grant permission for the use of the grand jury room at the Public Office, and a room at each of the divisional police-stations, for the purpose of holding coroners' inquests therein. The discontinuance of the use of public-houses for the purposes of inquests is a thing to be greatly desired.

Dr. Hill reports, as medical officer of health, that the death-rate during the quarter ending April 1st was 26·15 per 1000, as against 28·24 and 31·97 in the corresponding quarters of 1874 and 1875 respectively. The great decrease in the death-rate is due to the zymotic death-rate being very low—in fact, lower than at any time since the last quarter of 1872. Not a single case of zymotic disease remained in the Borough Hospital at the end of the quarter.

The portrait of the late borough coroner, Dr. Birt Davies, J.P., which was purchased by subscription, having been offered to the Corporation for acceptance, is to be placed in the new municipal buildings, where, to use the

* Observations on Injuries of the Spine and of the Thigh-bone, by Charles Bell (London, 1824), p. 6.

words of the Mayor in accepting the gift, it will remain as "a memorial of a public servant who had, with great fidelity and ability, devoted himself to the service of the borough for nearly forty years."

A new Scientific Society, the want of which has been much felt, has recently been inaugurated in this town. The Birmingham Philosophical Society will include in its programme all those subjects which are embraced by the British Association for the Advancement of Science, and will probably amalgamate with, or rather absorb, the Natural History Society. The entrance fee is to be one guinea, and the subscription either a guinea for those fellows who are eligible for office, or a less sum for associates, who are to subscribe something not exceeding half that amount, and who are not to be eligible for office. Considerable discussion has taken place as to whether the young society should be a section of the Midland Institute, but it has been thought better to start it on an independent basis.

The Birmingham Clinical Board have again declined to accept female medical students, and have also decided that their Transactions shall in future be considered strictly private and confidential. You will therefore hear no more of the doings of that body, and whether THE LANCET or the Birmingham Medical School will most suffer by the absence of all information regarding the proceedings of that institution may be left to your readers to decide.

At the last meeting of the Birmingham and Midland Association of Medical Officers of Health, Mr. Dove of Wolverhampton read a paper "On Diseased Meat as an Article of Diet," and Dr. Fenton read one "On the Application of the Watercloset System to Coventry."

The Midland Association of Municipal and Sanitary Engineers and Surveyors recently assembled at Warwick, under the presidency of the Mayor, and then, under the guidance of Mr. Pritchard, inspected the water works at Hasely, by which Warwick is supplied, and heard from him a detailed description of the works. Mr. A. W. Peel, M.P., at the dinner which subsequently took place, urged the great importance of sanitary science, and advocated the mapping out of the country into drainage districts, with a man skilled in sanitary science presiding over each district.

Dr. Maclachlan has done good service to the town of Walsall, of which he is the medical officer of health, in calling attention to the necessity for increase of cubic space and improved ventilation of lodging-houses, to the necessity of properly trapping drains and waterclosets as a preventive of typhoid fever, and to the importance of the early removal of excreta from privies and cesspools, with a view of making the town more healthy.

A new Cottage Hospital is about to be erected at Walsall, the old one having far too little accommodation for the increasing number of patients.

A somewhat curious case was on Saturday brought before the Coroner's Court. A child of four swallowed a halfpenny; attempts to remove it having failed, the child was unable to swallow, although respiration was not interfered with, and at the end of four days it died. At the post-mortem the coin was found in the œsophagus, where it had given rise to inflammation and the formation of an abscess.

Birmingham, May 9th, 1876.

Obituary.

GEORGE SOUTHAM, F.R.C.S.

OUR readers will have learned with deep sorrow the news of the death of Mr. Southam, of Manchester, which occurred on the 24th ult., after a protracted illness which for nearly a year past has unfitted him for active work.

Amongst the men who have during the last quarter of a century occupied a prominent position in the ranks of the medical profession in the provinces, the late George Southam fairly earned for himself an honoured place, and he will be long remembered as a thoroughly earnest and good man, as a most excellent and skilful surgeon, who by his whole work and bearing strove, so far as lay in his power, to advance the interests of the profession to which he belonged. That his efforts were not unappreciated by his professional brethren is attested by the fact that he was at the time of his death a member of the Council of the Royal College of Surgeons, and that he had filled the honourable post of President of the Council of the British Medical Association.

Mr. Southam was born in Manchester on the 3rd of December, 1815, and was educated in the Manchester Grammar School, whence he proceeded to study medicine, first of all, in the medical school of his native city, and afterwards in University College. In 1836 he was admitted a licentiate of the Society of Apothecaries, and in 1838 a member of the Royal College of Surgeons. On the completion of his student's career he was strongly urged by his friends to come to Manchester, and a vacancy occurring he successfully applied for the post of house-surgeon to the Salford Royal Hospital and Dispensary, an institution with which he became soon connected in the capacity of honorary surgeon. He soon gave instance of his surgical zeal and acumen in two papers on Ovariotomy. The first of these was published in 1843, in the *London Medical Gazette*, with the title "Removal of a Dropsical Ovarium," and was the record of a successful case of ovariotomy, with remarks on the objections to the operation. No one can read this paper, or the one that followed it in 1845, entitled "Removal of an Encysted Tumour of the Left Uterine Appendages," in which Mr. Southam's second and likewise successful case of ovariotomy is recorded, without being struck by the fairness and ability with which the writer discusses many points in the physical diagnosis of ovarian tumours, and argues in favour of an operation which now needs no defence, but which was then by many—nay, by most—surgeons held to be generally unjustifiable. How fully have the results which have been attained by Spencer Wells and Keith borne out the truth of the prediction contained in the closing paragraphs of Mr. Southam's first paper:—"Considering that extirpation of the ovary is still in its infancy, there is every probability that as our experience increases it will, under proper restrictions, prove as successful as lithotomy. The surgeon will be thus enabled to restore to health individuals who must otherwise have dragged on a miserable existence for a considerable period. A glorious monument will be raised to the healing art through the improvement of surgical knowledge, and that boldness and energy which the timid were but too ready prematurely to condemn, will be ultimately sanctioned by an enlightened and applauding profession." In a third paper, entitled "Observations on the operation of Ovariotomy," Mr. Southam describes his third operation, which was followed by a fatal result. The records of this case have a special interest added to them by the fact that the tumour was examined by the late John Goodsir and Dr. John Reid, and that the reports of their examination are appended. We cannot help quoting an interesting paragraph in the report of the former of these eminent men, though it has no relation to the subject of our notice; it concerns the possibility of deciding by microscopic examination the malignancy or non-malignancy of morbid growths. "I put very little faith," says John Goodsir, "on the microscope in detecting the nature of tumours of any kind. It is by what we call in natural history the *habit*, or *general appearance* or *bearing* of *plant*, *animal*, or *morbid growth*, that the *species* or *nature* in doubtful cases is to be determined. In disease this tact in discrimination is to be acquired, not by poring through a microscope, but by experience in the *diagnosis* and *handling* of tumours in the living, and the examination by the naked eye of their general appearance in the dead. The microscope can only *verify* the *previous determination*." Everything which John Goodsir wrote (and alas! he left us but little out of his vast stores of knowledge) possesses an interest, and so we felt almost compelled to refer to this interesting sentence as we came upon it in our perusal, for the purposes of this notice, of the writings of our deceased friend.

After his election as surgeon to the Salford and Pendleton Royal Dispensary, Mr. Southam soon acquired a large general surgical practice, which continued to increase, though it naturally grew more select and lucrative, to the very end of his life. In 1848 he was elected one of the dispensary surgeons of the Manchester Royal Infirmary, an office which corresponded to the present post of assistant-surgeon, and in 1855 he was elected surgeon. During the years which had passed Mr. Southam had been no idle man, for to the duties of a busy practice he had added the labours

and anxieties not only of teaching anatomy and surgery, but of organising a medical school. Since the year 1824 a school of medicine, the Pine-street School, had existed in Manchester. Established through the exertions of the late Mr. Turner, this school, which was the first fully equipped medical school in the provinces, was carried on without any opposition until 1850. At that time Mr. Southam, aided by several enthusiastic friends, conceived that it would be to the advantage of medical education that a second school should be formed in Manchester, and they started the medical school which, taking its name from its site, went by the name of the Chatham-street School. This institution, owing to the vigour and earnestness of the men who had thrown their hearts into it, competed so successfully with the one first established that amalgamation became a necessity. In 1858 the founders of the two rival schools came to the conclusion that they would but promote the interests which they had at heart by combining their resources, and then was formed the Manchester Royal School of Medicine, which continued its independent and honourable existence until 1872, when after mature consideration, it was determined to amalgamate it with the Owens College. It is impossible for anyone who was not acquainted with the late Mr. Southam adequately to appreciate the self-sacrificing devotion with which he gave up time, money, and thought to advance the school with which he was connected. For a long time before the actual union, Mr. Southam had foreseen the advantages which must accrue to a medical school by intimate connexion with an institution such as the Owens College, where students would enjoy facilities for scientific study which could rarely be afforded in any purely medical institution. He believed that in Manchester the conditions for the establishment of a really important school of medicine actually existed, and that success was best to be attained by following the examples of Scotch universities, and of University and King's Colleges in London, where medical schools formed but part of the one *studium generale*. It was very much owing to Mr. Southam's exertions that the ultimate amalgamation with Owens College was effected. After the amalgamation he became, jointly with Mr. Lund, professor of Surgery, and he also assumed the duties of director of medical studies. Those who take an interest in the cause of medical education in England, and who are led to visit the beautiful medical school buildings which now form a part of Owens College, should not forget that the present satisfactory condition of the school is greatly due to the unwearying exertions of one of its founders—George Southam.

In 1853 Mr. Southam was elected a Fellow of the Royal College of Surgeons. In June, 1873, he received a requisition signed by 148 Fellows of the College, inviting him to become a candidate for one of the seats in the Council of the College, in succession to his old colleague, Mr. Turner. At the election, which took place in July of the same year, he was one of the four Fellows selected to fill the vacancies in the Council, being third on the list. Sir James Paget and Mr. Haynes Walton were above him, and Professor Marshall below.

We have already alluded to the fact that Mr. Southam had occupied the post of President of the Council of the British Medical Association, and we believe we are correct in stating that, but for the serious illness which assailed him in the early part of last year, he would have been elected to fill the presidential chair of the Association at the meeting which it was at that time intended to hold in Manchester during the present year.

During the winter of 1874-75, although yet engaged in the duties of his practice, which was constantly becoming more onerous, symptoms developed which occasioned some anxiety; he complained of breathlessness, and had a clanging, obstinate cough, with occasional attacks which he described as of slight spasm of the glottis. He was advised to take a holiday, and left Manchester with some friends for a fortnight's rest, but it was too late. Whilst away he was seized with symptoms of angina pectoris, and became very ill. He hastened to London to place himself under the care of his trusty friend Dr. Sibson, who found him suffering from pneumonia; his heart was apparently dilated and weak, there was a faint murmur of mitral insufficiency, and some evidence of renal disease. He was taken to Manchester, and from that time until his death lingered on in a state which precluded any hopes of his recovery. For some time after his return to Manchester Mr. Southam suffered from the most distressing and formidable attacks of angina; these gradually disappeared, but excessive œdema of the lower extremities and ascites made their appearance.

Throughout his long illness Mr. Southam was assiduously watched by many of his professional brethren. He was, however, specially under the care of his friend Dr. Eason Wilkinson and of Dr. Sibson, who on several occasions went from London to Manchester to see him. These visits of Dr. Sibson were to him a source of great pride and comfort.

In 1842 Mr. Southam married Rebecca, daughter of Sir Elkanah Armitage; she died some years ago, leaving four daughters and two sons. Of these the elder, George, is a partner in the firm of which his grandfather is the head; and the younger, Ford, after a distinguished career at Rugby and Oxford, where he took a first-class in natural science at his B.A. degree, has just entered the medical profession.

In addition to the papers on Ovariotomy, to which reference was made, Mr. Southam contributed papers on "Elephantiasis," "Recto-vesical Lithotomy," "Arterio-venous Aneurism of the Scalp," and "Treatment of Aneurism by Pressure," to the Transactions of the Medico-Chirurgical Society, of which he was a member; and various other papers on surgical subjects were read by him from time to time at meetings of the British Medical Association.

Mr. Southam was a man of a generous and affectionate nature, possessed of far greater ability than many who judged him by his mere powers as a speaker would allow. As a surgeon he was unquestionably a most capable man; his opinions were very sound, and without being a brilliant, he was certainly a thoroughly good and most successful operator. He had performed the operation of lithotomy 120 times, and only lost one patient.

DR. J. E. CARTE, C.B.

WE regret to announce the death of Dr. John Elliott Carte, C.B., late Inspector-General of Hospitals (half-pay), aged sixty, at Brighton, on the 19th ult. The deceased officer, after graduating in arts and medicine in the University of Dublin, was gazetted as Assistant-Surgeon to the 14th Regiment on the 31st December, 1841. With this regiment he proceeded to Canada, and his name was honourably mentioned by the Governor of Tortola in his despatches of August, 1853, for his zeal and attention in providing for the comforts of the sick while serving as medical officer in charge of the combined force of English and Danish troops, which were employed in suppressing the insurrection of the natives, who sacked and burned Rhode Island.

In the years 1860-61, Dr. Carte acted as senior medical officer in the Province of Auckland, New Zealand. He also served in the second war undertaken to suppress the Maories in 1863-64, and when senior medical officer in the field was mentioned in the despatches of General Cameron "for prompt assistance to the wounded, many of whom he attended under fire," during the engagement of July, 1863, for which he received C.B. and medal. He attained the rank of Regimental Surgeon on the 18th February, 1853; Surgeon-major, 31st December, 1861; Deputy Inspector-General, 22nd June, 1870; and retired on half-pay, with the honorary rank of Inspector-General of Hospitals, the 17th February, 1872.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

M. D. Macuna, Bombay; W. T. Thompson, Glasgow; C. Atkin, Sheffield; H. Williams and E. C. Hope, Liverpool; J. H. Pettinger, J. E. Andrews, J. Lofthouse, H. Wylde, W. Scowcroft, Manchester; G. F. Coleman, Leeds; T. Martin, F. Hickman, C. P. Chattock, J. M. Wheler, J. A. Potts, Birmingham; E. Law, Sheffield and Edinburgh; W. G. Irvine, Newcastle-upon-Tyne; H. J. Gover, Cambridge and St. Thomas's Hospital; E. Davis and J. H. Muskett, London Hospital; J. Morris, Galway; E. L. Smith, Charing-cross Hospital; G. T. Trewman, Westminster Hospital; G. H. Cowburn, St. George's Hospital; F. A. Harris and W. A. D. Cowen, St. Thomas's Hospital; H. C. Burdett, Bir-

mingham and Guy's Hospitals; J. Osborne, L. W. Reynolds, J. G. Gravely, R. A. H. Hart, G. F. Crooke, H. H. Bovil, W. J. Coles, W. G. G. Parker, J. F. Briscoe, R. F. Cox, F. W. Apthorpe, J. Codner, H. E. Walker, G. F. Symons, J. Alexander, and E. A. Jones, Guy's Hospital; H. T. A. B. Fellowes, W. J. Candler, T. E. Evans, F. F. Hodgson, C. H. Leftwich, W. S. A. Griffith, and W. H. Johnson, St. Bartholomew's Hospital; and R. Pavell, Sheffield and St. Bartholomew's Hospital.

Of the 86 candidates examined on the above-mentioned days 33 failed to satisfy the Board of Examiners, and were referred for three months further anatomical and physiological study.

The total number of candidates admitted to the primary examination for the Membership during the past and present months was 393, of whom 126 were rejected. The number admitted to examination during the corresponding period in 1875 was 455, and the rejections were 117.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on May 4th:—

Bower, Ernest Dykes, Park-square, Leeds.
Carter, Frederick Heales, Great Northern Hospital.
Glyn, Herbert Arthur, Gloucester-street.
Hetley, Henry, Hoxton House Asylum.
White, Octavius Mark, Marlborough-hill, St. John's-wood.

The following gentlemen passed the Primary Professional Examination on the same day:—

Julius Cæsar, London Hospital; John Henry Morris, Manchester School of Medicine; Edward Bass Reckitt, Leeds Royal Hospital.

ON Monday last the Thames Conservators served notices on all the sanitary authorities having jurisdiction on the banks of the Thames, to discontinue the discharge of sewage into the river, in default of which proceedings are threatened. This step, if taken in earnest, may tend towards the arrival at some decision as to the drainage of the Thames Valley, about which so much has recently been talked and so little yet done.

PRESENTATION.—On Wednesday, the 10th day of May, a meeting of the past medical officers and others associated with the West Riding Asylum, was held at 6, Trevor-terrace, to present Dr. James Crichton Browne with a testimonial. The gift consisted of a handsome tea and coffee service, and also a pair of antique silver cups for the dining table.

ROYAL KINDNESS.—The Hospital for Sick Children in Great Ormond-street has just received a large quantity of toys from Her Majesty, who during her recent visit to Germany selected those which are best adapted to amuse the children. This is not the first occasion on which Her Majesty has made a similar present to the hospital. The new building, it may be added, has recently been opened for the reception of patients.

Medical Appointments.

ALTDORFER, Dr. M., of Gingst, Rügen, has been appointed a Resident Medical Officer to the German Hospital, Dalston.

BIGGIE, S. F., M.R.C.S.E., M.B., has been appointed Assistant Resident House-Surgeon to the Liverpool South Dispensary, vice McGrath, resigned.

BORNHAM, W. T., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Winfrith District of the Wareham and Purbeck Union, and Medical Officer of Health.

BROWN, T. Ll., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Warneford, Leamington, and South Warwickshire Hospital, vice Crowe, resigned.

BROWNE, T. J., A.B., M.A., L.R.C.S.Ed., & L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Dungannon Dispensary District of the Dungannon Union, co. Tyrone.

BURGESS, R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Coagh Dispensary District of the Cookstown Union, co. Tyrone, Sanitary Officer for the Coagh Sub-district of the Cookstown Rural Sanitary District, and Medical Attendant to the Royal Irish Constabulary, Coagh, vice Kerr, resigned.

CLIBBORN, W., B.A., M.B., has been appointed Assistant Resident House-Surgeon to the Liverpool North Dispensary, vice Browne, appointed Medical Officer for the Dungannon Dispensary District, Dungannon Union.

COGAN, L. F., M.R.C.S., L.R.C.P.Ed., has been appointed a Medical Officer of Health for the Borough of Northampton.

CUNDELL, G. B., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Kew District of the Richmond Union, Surrey, vice Satchell, resigned.

ELLERTON, J. F. H., M.R.C.S.E., has been appointed Third House-Surgeon to the Royal Southern Hospital, Liverpool.

HEARN, R. T., M.B., L.R.C.S.I., has been appointed an Assistant to the Master of the Coombe Lying-in Hospital, Dublin, for three years.

ILIFFE, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Derby Urban Sanitary District.

KIRKLAND, J., L.R.C.P.Ed., L.F.P.S.G., has been appointed Medical Officer, Public Vaccinator, and Sanitary Medical Officer for the Western District of the Parish of Old Kilpatrick, Dumbartonshire, vice Allison, resigned.

LONGRIGG, D., M.R.C.S., has been appointed Surgeon to the Beckenham Dispensary and Lying-in Charity.

MCEWEN, W., M.D., has been appointed a Surgeon to the Royal Infirmary, Glasgow, vice Dewar, deceased.

MCKANE, G. O., L.R.C.P.Ed. & L.M., L.F.P.S.G., has been appointed Medical Officer and Public Vaccinator for the Byers-green District of the Auckland Union, vice Todd, resigned.

MADDEN, A. D., L.R.C.S.I., L.A.H.D., has been appointed Medical Officer and Public Vaccinator for the District comprising the Parishes of Harlow, Sheering, Matching, and Magdalen-Laver in the Epping Union, vice Day, resigned.

MUTCH, R. S., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Western No. 2 District of the Billesdon Union, Leicestershire, vice Wilby, deceased.

OBERMÜLLER, Dr. H. J., of Aix la Chapelle, has been appointed a Resident Medical Officer to the German Hospital, Dalston.

OLDFIELD, T. B., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Heckmondwike Urban Sanitary District.

O'MEARA, M. A., L.R.C.S.I., L.K.Q.C.P.I., & L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Piltown Dispensary District of the Carrick-on-Suir Union, co. Tipperary, vice Bowers, deceased.

SHEARER, J., M.A., has been appointed House-Physician to the Royal Infirmary, Aberdeen, vice Simpson, whose appointment has expired.

SKINNING, R., M.D., F.R.C.S.Ed., has been reappointed Medical Officer of Health for the East Molesey Urban Sanitary District.

STONE, G., L.R.C.S.Ed., L.R.C.P.Ed., L.S.A.L., has been appointed House-Surgeon to the Liverpool Eye and Ear Infirmary, vice Green, resigned.

SUTTON, Dr. H. G., has been appointed Fifth (additional) Physician to the London Hospital.

THOMPSON, Dr. J. A., has been appointed Physician to the Artists' Amicable Fund, vice Scott-Alison, resigned.

TRAIL, G. S., M.A., has been appointed House-Surgeon to the Royal Infirmary, Aberdeen, vice Smith, whose appointment has expired.

TUKE, J. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the South District of the Stratton Union, Cornwall, and Medical Officer of Health for the South Sub-District of the Stratton Rural Sanitary District, vice Burgess, resigned.

Births, Marriages, and Deaths.

BIRTHS.

AIRY.—On the 3rd inst., at Kidbrook-grove, Blackheath, the wife of Hubert Airy, M.D., of a son.

DUNDAS.—On the 22nd March, at Port Blair, the wife of George Albert Dundas, Bengal Medical Department, of a son.

HARRIS.—On the 4th inst., at Coldharbour-lane, the wife of Henry Harris, M.R.C.S., of a daughter.

PEATFIELD.—On the 3rd inst., at Pleasley-hill, Mansfield, the wife of Thos. J. Peatfield, M.R.C.S.E., Army Medical Department, of a daughter.

SAYER.—On the 21st March, at The Cedars, Kenninghall, Norfolk, the wife of Thomas John Sayer, M.R.C.S., &c., of a daughter.

SLOAN.—On the 30th ult., at Cowanbrae, Catrine, the wife of D. Sloan, M.D., of a daughter.

MARRIAGES.

EVANS—FITZPATRICK.—On the 8th inst., at Sephton Parish Church, by the Rev. E. Horley, M.A., Rector, John Henry Evans, M.R.C.P.Ed., M.R.C.S.E., of Seaforth, to Helen Gertrude, daughter of the late C. D. Fitzpatrick, L.R.C.P., M.R.C.S.E., of Litherland, near Liverpool.

GRIFFITHS—VERITY.—On the 8th inst., at All Saints Church, Cheltenham, by the Rev. C. Moore, Richard Samuel Parnell Griffiths, M.R.C.S.E., and Surgeon R.M.L.I., to Sarah Harriette, eldest daughter of G. H. Verity, Esq., of Bournside, Cheltenham.

LUSH—SCHOLFIELD.—On the 6th inst., at St. Mary Magdalene's, St. Leonards-on-the-Sea, by the Rev. W. W. Hume, William J. H. Lush, F.L.S., M.R.C.P., M.R.C.S., L.M., Associate of King's College, London, of Fyfield, Andover, to Katherine Martha Scholfield, youngest daughter of the late John Scholfield, Esq., of Fairfleet Hall, Yorkshire.

MARSH—BEAMAN.—On the 3rd inst., at the Parish Church of St. Chad, Shrewsbury, by the Rev. John Yardley, Vicar, Walter Alfred Marsh, M.R.C.S.E., of Dante-road, Newington Butts, to Alice Matilda, fourth daughter of Mr. John Beaman, of Garmstone, Salop. No cards.

DEATHS.

BARTER.—On the 22nd ult., at Gay-street, Bath, Clement Smith Barter, M.B., aged 39.

CLARKE.—On the 17th ult., at Colerains, Andrew Campbell Clarke, L.R.C.S.Ed., aged 70.

DIGBY.—On the 30th ult., at Hunter-street, Brunswick-square, Edward Digby, M.R.C.S.E., aged 68.

EVANS.—On the 6th inst., at Harwich, in her 30th year, Sarah Sophia, the beloved wife of Samuel Evans, L.R.C.P.L., M.R.C.S., &c., and youngest daughter of the late Harcourt Bunnacles, Esq.

HADDELSEY.—On the 23rd ult., at Roman-road, Bow, Charles Turner Haddelsey, M.R.C.S.E., aged 49.

HOPTON.—On the 22nd ult., at Grove-road, Holloway, Abney Charles Hopton M.D., formerly of Cannock, Staffordshire, aged 39.

HUMPHRYS.—On the 11th ult., at Rodney-street, Liverpool, George Humphrys, M.D., aged 77.

HUNT.—On the 23rd ult., at Walcot, Bath, Ezra Hunt, L.S.A.L., aged 67.

PATTERSON.—On the 26th ult., at Foulmire, Cambridgeshire, Mervyn Patterson, L.S.A.L., aged 74.

THELWALL.—On the 17th ult., at Farndon, Cheshire, William Thelwall, L.S.A.L., aged 68.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

PROFESSOR SCHIFF AND THE ITALIAN PRESS.

THE two leading journals of Italy—the *Opinione*, the organ of the Liberal-Conservative Ministry, lately in power; and the *Diritto*, the mouth-piece of the Radical party, which has just acceded to office—forget their differences in a common lamentation over the loss of Schiff to Italian science. The *Diritto* does not hesitate to class the persecution to which the German physiologist has been subjected with those under which Bruno, Telesio, Campanella, and Galileo suffered. To attain their end, the same journals adds, the anti-vivisectionists "circulated satirical doggerel, and vulgar squibs; they invented fabulous stories of the cruelties perpetrated in the physiological laboratory. When the intelligence and liberality of the nation stepped in to provide him with a proper laboratory, his persecutors raised the cry of 'cruelty to animals,' and succeeded in depriving him of the means of instruction accorded to every teacher of physiology in enlightened Europe. It is incredible," adds the *Diritto*, "that the gentle Florence should have so demeaned herself in the eyes of the cultivated cities of Europe, which cherish with pride and surround with substantial esteem such men as Helmholtz, Du Bois Reymond, Virchow, Ludwig, Bernard, and others, who not more loyally than Schiff represent the grand movement of modern science.....In Italy medicine has too long been a prey to *à priori* generalisation; and even in quarters where the experimental method has been recognised, the recognition has been grudgingly given, and a quite secondary place accorded to physics, chemistry, physiology, histology, pathological anatomy, and such true bases of clinical doctrine—studies which, moreover, their jealous entertainers admitted to a patronising hospitality as interesting, if idle, curiosities. Matteucci reinvoked, in this state of things, the spirit of Galileo, and, in Tuscany, associated with the names of Pacini and Amici, the worthy name of Schiff. How far this latter physiologist justified Matteucci in this step, let the young scientific mind of Italy answer! His lectures on the Encephalic Nervous System, rich in new and important conclusions; his lectures on Digestion; his researches on the Digestive Power of the Enteric Juice; on the Elevation of Temperature experienced by the Nerves and Nerve Centres as a consequence of sensory irritation; on the Biliary Secretion; on the Functions of the Cervical Ganglia, and on the Cardiac Nerves, attest to the world at large how much Italy—the scene of those labours—is beholden to him for physiological learning and light." The *Diritto* concludes by asking if it is yet too late to prevent the departure of the illustrious German? "We ardently desire it," says the *Diritto*," and we hope our country will not prove wanting in her duty to one of the greatest of living physiologists; to one who has conferred undying honour on the scientific renaissance of Italy; to one who has guided his youth to proficiency in those studies which at no distant epoch will outrival armies and navies in the heritage they bequeath to humanity."

Dr. J. A. Wilson.—The letter shall be forwarded to the author.

ON A CASE OF VESICO-VAGINAL FISTULA.

To the Editor of THE LANCET.

SIR,—As the subjoined case of vesico-vaginal fistula may be of interest to the profession, in consequence of the unusual, perhaps I might say unique, mode of its causation, I have been induced to publish it, the assigned, and I believe true, cause of its occurrence being the lifting a heavy weight when the bladder was distended with urine. The history of the case is as follows.

E. W——, by occupation a washerwoman, thirty-eight years of age, pregnant for the seventh time, and from two to three months advanced, was lifting a heavy mangle which had slipped from its bearings, when she felt something suddenly give way, accompanied by a gush of fluid. She felt faint and sick, and sat on a chair to recover herself, but did not lose her senses. On recovering from the faintness she found her clothes saturated with water, and from that time suffered from constant dribbling of urine, and lost all desire and ability to evacuate her bladder in the usual way. She is quite certain that there was no vesical or vaginal irritation or inflammation prior to the occurrence of the accident, and was cognisant of the fact that her bladder was full when the rupture occurred. About a fortnight after this she consulted me, and on making a spectacular examination of the vagina I found a lacerated wound about an inch in length and oblique in direction, situated at a spot midway between the meatus urinarius externus and the extreme upper end of the anterior wall of the vagina. The appearance of the wound was that of a rent or tear, and through this the urine was constantly flowing; there was no loss of substance of the edges of the rent. She declined all operative interference until after the birth of her child, thinking she might get better after the child was born; and as she was very decided in this belief, the case was allowed to stand over until after her confinement, which took place without any complication; indeed her labour was an unusually rapid one, the child being born with but few pains before the arrival of the medical attendant. Two months after her confinement, finding that her case did not improve as she had anticipated, she again consulted me, and consented to an operation, and on February 3rd of the present year, in concert with Mr. Furse and Dr. Hatherly, I accordingly operated on the case.

The patient's bowels having been thoroughly cleared by a dose of castor oil the day previously, and an enema having been administered on the morning of the operation, she was placed on her elbows and knees on a table of convenient height, with a good light from a window, after the manner recommended by American surgeons, and no anæsthetic was administered. The perineum and posterior wall of the vagina were well drawn upwards by Sims's duck-bell speculum, while the labia and lateral walls were held aside with bent spatulæ. A flexible metallic bougie was then introduced through the urethra into the bladder and its end passed out through the fistula, and the bougie being bent back upon itself, the wound was drawn down as low as possible, and retained by the hand of an assistant. The edges of the fistula were then carefully and completely pared with a scalpel, care being taken not to interfere with the vesical mucous membrane in any way, while the vaginal aspect of the wound was bevelled off; the vagina was then washed out with cold water, injected through an enema syringe, until all hæmorrhage had ceased, and three silver-wire sutures were introduced in the usual manner by means of curved tubular needles, each suture wire being driven as deeply as possible into the tissues of the vaginal wall without penetrating the bladder, while the spaciousness of the vagina permitted a long bold to be taken latterly, so that each suture was entered and brought out from half to three-quarters of an inch from the newly denuded edges of the wound. The bougie was then removed, and the sutures twisted and cut off short; a gum elastic male catheter was introduced into the bladder, and retained by tapes attached to a waistband. The patient was placed in bed on her right side, and a grain of solid opium at once administered. From this time she was kept constantly in this position, and ordered light but nourishing diet, such as beef-tea, mutton-broth, milk, &c., and a grain of solid opium was given at first twice a day, and afterwards every six hours, to keep the bowels unmoved—a point on which Dr. Marion Sims lays great stress, and to which he attributes much of his success in these cases. The catheter was regularly removed and cleaned, or another substituted for it, twice in the twenty-four hours, and the case progressed favourably towards recovery for a fortnight from the time of operation, when it would appear that union had taken place to a considerable extent; for while I was out of town on the fifteenth day the catheter became blocked by a plug of mucus, and remained so for more than an hour, by which time I found that, although some urine had passed by the side of the catheter, there was nearly half a pint of urine in the bladder, and not the slightest trace of any having passed through the fistula.

On the seventeenth day after the operation (the bowels not having been opened) an enema of warm water was administered to clear out the lower bowel, and at the same time a dose of castor oil given by the mouth; this was followed by two very copious evacuations, and much relief to the patient, without disturbing the wound to any injurious extent. The opium treatment was again resumed for another week, the catheter being still retained in the bladder. At the end of this time an enema and dose of castor oil were again given, and the wound examined, when it was found that the sutures still retained their hold without exciting irritation. They were therefore not removed, although the wound appeared completely healed, as it was thought they might afford some support to the as yet weak cicatrix. The catheter was, however, now dispensed with and the opium discontinued, and after this time the bowels acted without assistance from medicine.

The sutures were removed at the end of five weeks from the date of operation, and she left her bed at the termination of the seventh, and a week later resumed her occupation as a washerwoman, being, to use her own expression, "as well as she ever was in her life," and so she has continued up to the present time.

I consider the success of the operation is attributable in this case especially to the following circumstances:—

1st. The good health and unexcitable temperament of the patient herself, who took a particularly hopeful view of the case, and was extremely obedient to the directions given her with regard to diet, position, &c.

2ndly. To the sutures being simply twisted wire, not complicated by any form of button or bar, which is not only difficult to apply, but exceedingly irritating after its application, and no doubt tends to produce suppuration by pressure.

3rdly. The bowels being restrained from acting for so long a time by opium prevented any straining of the newly adapted parts, and gave the tissues that rest which is so essential to the success of all plastic operations.

4thly. The capaciousness of the vagina was such as to permit the sutures to be entered and brought out at a good distance from the edges of the wound, by which means the parts were relieved from all injurious tension, such as might retard or arrest union.

5thly. The method adopted of bringing the fistula well down by means of the bent bougie greatly facilitated the denudation of its edges, which were thoroughly bevelled off and revived, without interfering with the vesical mucous membrane, which latter must in consequence have been rolled up on each side within the bladder after the sutures were twisted, and thus by a valve-like action prevented a single drop of urine from insinuating itself between the edges of the wound.

In conclusion, I have to acknowledge the able advice and aid of Mr. Furse and Dr. Hatherly, who kindly assisted at the operation.

I remain, Sir, yours truly,

THOMAS SANDERS, M.R.C.S. Eng.

South Molton, North Devon, May, 1876.

DEATH OF M. CHARRIÈRE.

THIS universally known surgical instrument maker died a few days ago in Paris. For some time past he had retired, and his establishment was successfully conducted by M. Collin. It is not too much to say that M. Charrière by his skill and inventions has largely contributed to the progress of surgery. Before him there were simply cutlers, who played a very humble part in the manufacturing of surgical instruments. Charrière threw a great deal of originality into his labours, and such men as Civiale, Leroy d'Etiolles, Amussat, Velpeau, and others were very ready to adopt his suggestions, and highly pleased at the manner in which the work was carried out. The foundation of the establishment dates as far back as 1820, and rewards and medals at the principal exhibitions were largely bestowed upon Charrière. He obtained high ranks in the Legion of Honour, and was very much respected. A large concourse of medical men and of the employés of the house were present at the funeral.

THE TREATMENT OF ACUTE ORCHITIS.

SEVERAL more letters on the above subject have reached us. We are, however, unable to publish any further correspondence on this subject. We regret this the less inasmuch as the discussion has of late diverged from the consideration of the treatment of acute orchitis by puncture to a vague exposition of the various modes of treating this disease.

Mr. S. M. Bradley shall receive a proof without delay.

SPIRITUALISTIC HUMBUG.

IT will, doubtless, be in the recollection of our readers that not long ago a Miss Eva Annie Fay paid a visit to this country, and that she went through a series of mysterious performances at the Crystal Palace and Queen's Concert Rooms, which at the time attracted a good deal of attention. We were ourselves present at one of these so-called *séances*, and were struck with the cleverness exhibited, and the skill and rapidity with which she performed her tricks whilst apparently securely tied up in a cabinet; for we regarded the whole thing, of course, as a very clever piece of jugglery in its way—indeed no claim was made for any supernatural agency in the matter. Such claims have, however, since been boldly advanced; but the method by which this so-called spiritualistic medium has succeeded in bewildering the public has been thoroughly laid bare by a Mr. Washington Irving Bishop, who has for some years amused himself by investigating occult doings of this sort. The unravelling of the Katie King mystery, and the revealing of the method by which the Eddy Brothers imposed on the credulity of many thoughtful and intelligent persons, are also due to Mr. Bishop's acumen. The *New York Daily Graphic* of April 12th contains a verbal and pictorial description of the *modus operandi* of Miss Annie Eva Fay's performances. Mr. Bishop submits to being tied in precisely the same way as did the lady, and does precisely the same things, and does them just as well. The bells ring, the "phantom guitar" is seen, the tambourine is flung about, and the waterpail is inverted on his head. At the request of Drs. Hammond, Mott, and Hepworth, of New York, Mr. Bishop has exposed the nature of the pretensions of Miss Fay, who succeeded so well in imposing on Mr. Crookes that he endorsed with the authority of his name the genuine nature of the lady's mediumship. It appears that there is a certain amount of "play" in the rings and cords with which the medium is tied, and that, by dint of practice, the hands can be got round to the left side after they have been tied as tight as possible to one another and to the ring behind. The illustrations in our New York contemporary of course make this clearer than any verbal explanation can do. There is, moreover, what is called a light and a dark circle. The dark circle is radically different from the light circle. Fifteen persons selected from the audience sit round the medium in a circle, about an arm's length from her. Fans, musical instruments, &c., are placed in the laps of the persons in the circle, all join hands, and the lights are turned out. Immediately there is a sort of musical pandemonium. In order to make it certain that the medium is not producing the phenomena, it is announced before their commencement that she will constantly keep clapping her hands, and this clapping is no doubt heard during the time the "phenomena" are going on; but she has been in reality all the while using one hand to manipulate the instruments, while she slaps on her exposed knee with the other, to produce the impression of clapping her hands, in which she is really found engaged with an innocent expression when the gas is lighted again. Mr. Bishop gives explanations of other tricks; but as they are all of one and the same kind, the above will suffice as a sample.

M. I. K.—1. Bryant or Erichsen.—2. Roser or Bellamy.

MEDICAL PRACTICE AT THE CAPE OF GOOD HOPE.

To the Editor of THE LANCET.

SIR,—Having seen something of the Cape of Good Hope during a few years' service, and seen some of the medical practitioners there, I beg, in reply to your correspondent, to say that the colony may suit very well a roving doctor with a good constitution, and fond of out-door life. The climate is good, the people hospitable, money scarce, the distances great, no railroads to speak of, but plenty of horses and bullocks and lumbering waggons, and time no object. A man just passed and registered, with some money and fond of sport, and not tied to place or time, might very well spend a year or two in South Africa, seeing numbers of people, and prescribing for as many more he would never see again, pocket a few coins, and have offered to him in the country bags of potatoes, a thin cow, scraggy sheep, or used-up horse by way of fees. The idea of making a living out of the medical profession alone would be considered quite ridiculous there, so that many supplement this by various other mercantile and agricultural speculations. At the end of a few years this system inevitably leads to degeneracy of scientific training, obliviousness of professional knowledge and practice, and the young doctor must eventually return home, if he wishes to preserve his individuality or his hard-earned and expensive attainments from going to rust.

Your obedient servant,
Edinburgh, April, 1876. VIATOR.

To the Editor of THE LANCET.

SIR,—If "A. R. C." is conscious of possessing the necessary qualifications of earning £100 per annum in his native land, allow me to inform him that he would easily realise £200 in the same period at the Cape of Good Hope, especially if he located himself in an up-country town. Young medical's plan would be to proceed to Cape Town, and inquire of the Colonial Secretary for a vacant district surgeoncy, which, if he was successful in obtaining, would give him an opportunity of looking round and judging for himself as to the capabilities of the country. No steady man who knows his business need fear that he will be unable to obtain a moderate living in a glorious and very enjoyable climate. Practices of over £500 per annum, however, are very few and far between, though a really clever and popular man might aspire to one of £1000 per annum in a few years.

Yours obediently,
Portobello Barracks, Dublin, April, 1876. THOMAS PATON.

DEATH OF PROFESSOR BÉHIER.

WE regret to learn of the death of this eminent physician, who for many years had held a high position in Paris. In fact, since the decease of Trousseau, Dr. Béhier had taken the lead, and his clinical lectures at the Hôtel Dieu were in great favour among students. M. Béhier was member of the Academy of Medicine, and universally respected.

CYSTICERCI IN THE EYE.

At a recent meeting of the Berlin Medical Society the question of cysticerci in the eye was discussed. Whilst it was contended that the duration of life of the entozoon in the human eye was not extended over more than one year or a year and a half when it became encysted in the vitreous body, observations of the late Professor von Graefe and others were cited, according to which the cysticercus may remain active for a period of six or seven years. Professor Lewin, in a lecture on Cysticerci of the Skin, declared in favour of spontaneous migration of the hydatid worm, in opposition to the opinion of another member, who assumed the theory of passive locomotion by the blood-current. Von Graefe observed in two patients cerebral symptoms which disappeared when the cysticercus made its appearance in the eye, and in one case he saw cerebral disorder a year after the entozoon had entered the eye. Unstriped muscular fibres in the neck and in the membrane of the caudal vesicle enable the worm to move like the trichina. Von Graefe's description of the mode in which the cysticercus "broke into the vitreous body" also supports the theory of spontaneous motion. He states "that the spot of irruption into the interior of the eye may be anywhere, and is pretty often in the upper half of the visible background." The subsequent lowering in the corpus vitreum takes place in a diagonal direction, not simply by the law of gravitation. The case of a woman was cited in whom the entozoon had been found twenty years ago, and who had since served as a subject for ophthalmoscopic demonstrations in the Breslau Medical School.

ATTENDANCE ON MEDICAL MEN'S CHILDREN AT SCHOOLS.

MOST men would act as our correspondent, and decline to charge for attendance on the children of medical men at school. It is, doubtless, very inconvenient to have to attend over a long period, and perhaps for an infectious disease, the children of medical men, who are naturally more capable of criticising treatment and being dissatisfied with it than others. But the highest duty is always somewhat troublesome, and this is a case in point. We cannot with any satisfaction charge a medical man for medical services to his child. Where in a public school a certain sum is by regulation charged for medical care, the case is somewhat different; but for one medical man deliberately to send a bill to another for professional attendance is a procedure which is inconsistent with the theory of the fraternal relations of medical men to each other.

W. S. W.—The Home for Gentlewomen, Harley-street, W. All information may be obtained on application to the Secretary. The hospital in Moorfields.

A CAUTION.

To the Editor of THE LANCET.

SIR,—In your issue of to-day I noticed "a caution" signed by two of my professional neighbours; and as it may be satisfactory or amusing to them, may I trespass on your valuable space to state that I also on the same day, about five P.M., had a professional visit similar to that with which they were favoured. On arriving home from my afternoon rounds I was informed that a woman had been some time waiting for me in the dining-room. I desired to have her shown into my consulting-room, when a female met my gaze whom I immediately recognised as one who had been a second-class passenger under my care when I was surgeon of the Peninsular and Oriental steamship *Pekin*, and representing herself as "Mrs. M—— J——, returning from Australia to give evidence in the Tichborne trial." I immediately asked her if she were not this heroine, when, with ill-disguised embarrassment, she said, "Oh, no, doctor, my name is Smith, and have just come to town with a Mrs. Tyler, whom I want you to visit at Elm's-villa, Talbot-road, as she is expecting her confinement." Whilst going into the usual particulars, I was attracted by a copy of "Squire's Companion," 1873, which she carried quite openly, and I asked to see it with the excuse that I presumed it was a new edition. She handed it to me with the remark that she was taking it to a friend, and in course of conversation I searched most diligently for an owner's name, which failing to discover I returned the book, when she took her departure with a light and airy step, appearing, I now think, as if in thanksgiving for her narrow escape. In conclusion, "would you be surprised to hear" that in no way have I been further victimised than so far boxed.

Yours faithfully,
Colville-terrace E., Bayswater, May 6th, 1876. W. M. MACGRATH.

To the Editor of THE LANCET.

SIR,—Under the head "A Caution," a letter signed by two medical men appears in your last impression. Like them I have also been visited to my cost by the same or similar person some three weeks ago; but not having taken any particular note of her appearance I was at a loss to describe it, else I should have written to you at once. It did not occur to me that her story would remain exactly the same, otherwise that, without her appearance, might have afforded one of her later victims the privilege of handing her over to the police. Trusting, however, that she may yet try her game on once too often,

I am, Sir, yours faithfully,
Old Kent-road, May 8th, 1876. ANDREW MACLACHLAN.

THE GOVERNMENT AND QUACKERY.

Medicus is more sanguine than we are to believe that the time cannot be far distant when the Government will take up the subject of quackery. Any scientific man who reflects for a few minutes on the questions on which political men are spending the precious hours of the session must be amazed how intellectual men can so consent to occupy themselves and the time of the country, life and death questions all the while being evaded. Prescribing chemists are an anomaly. They not only break the law, but do much harm; but we are not sanguine of getting any more stringent laws against them than we already have.

Ignotus.—Courses of instruction on Diseases of the Ear and Diseases of the Throat are given in the Vienna Medical School, but not in English.

Xema must consult a surgeon.

W. A. P.—The letter shall be kept in mind.

REVACCINATION OF SMALL-POX NURSES.

THE complete efficacy of adult revaccination as a protection against small-pox was abundantly proved at the Metropolitan Asylum District Small-pox Hospitals during the severe epidemic of 1871-2. During the year ending 1st February, 1872, the officers, nurses, and servants engaged in the service of the Stockwell Small-pox Hospital numbered ninety-three, of whom only two suffered from the disease, and both recovered. One of these was not revaccinated, because she was deemed to be protected by having had small-pox six years previously. The second was revaccinated on arrival at the hospital; but "no doubt the poison was in the system before it could take its proper effect; it, nevertheless, modified the disease to such an extent that it was not found necessary to confine her to bed for a single day." Bearing this experience in mind, we regret to notice that during last week the wife of a boilermaker, aged twenty-nine years, died in the Small-pox Hospital at Leeds from this disease, and was described as having lately been a nurse in the hospital. She is said to have been vaccinated, and bore *one* mark on her arm. It appears scarcely credible that the authorities of the Small-pox Hospital at Leeds should not insist upon the revaccination of all persons employed as nurses in that institution, although the facts of the case mentioned above suggest its possibility.

RUGBY SANITARY AUTHORITY.

Mr. Seabroke will refer to our report on the "Sanitary Condition of Rugby School," he will see that our Commissioner makes a special point of thanking the medical officer of the school for the very valuable information afforded. Our report on the school was a favourable one, nor were our comments on the condition of the town at all severe. The sanitary authority of Rugby have to thank themselves for giving prominence to the defects we pointed out. We believe the chief evils to lie in defective drainage and an intermittent water-supply. There may have been others that escaped our notice, as we had not the benefit of Mr. Seabroke's information. We learn from that gentleman that extensive leakages have occurred from the water mains. The experience of Lewes and Over Darwen tells us that with an intermittent supply, where water can leak out, sewage can be sucked in!

Alumnus.—The suggestion to be realised would require another Crossed Cheque Bill. The evil of the false assumption of titles will be met without such extreme and impracticable measures.

Mr. Geo. Walker.—The subject will be found treated in any work on Genera Surgery.

SALICIN IN ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—The account of the following case of acute rheumatism treated by the administration of salicin is sent in response to the invitation of the leader on the subject in THE LANCET of the 29th ult.

Mary S——, domestic servant, aged twenty-three, a twin, whose previous history was good, was seized with aching pains in her limbs and general malaise on the 24th April. The following day her left knee was painful, though she continued about her work till the 26th, on the evening of which day she first came under observation. She was then in a febrile condition, with a pulse of 108, tongue loaded with white fur, whilst the left knee was found to be hot, swollen, and painful. She was at once ordered to bed, an aperient draught administered, and fifteen grains of bicarbonate of potash, ten minims of colchicum wine, and one drachm and a half of solution of acetate of ammonia ordered every three hours.

April 27th.—Passed a restless night; knee painful and tender. The aperient not having acted was repeated, and the bowels well relieved. Pulse 112.

28th.—Pulse 120; respiration 28; temperature 100·8°. Metastasis to right ankle and dorsum of foot. Bicarbonate of potash increased to two scruples every three hours.

29th.—Pulse 120; respiration 30; temperature 101·8°. Condition much the same as yesterday; copious acid perspiration. Continue the medicine; fifteen grains of Dover's powder at bedtime.

30th.—Pulse 108; respiration 34; temperature 102°. Pain in knee and ankle very severe; passed a restless night. Finding the patient getting worse, the bicarbonate of potash &c. were discontinued, and fifteen grains of salicin in water given every three hours.

May 1st.—9 A.M.: Pulse 110; respiration 30; temperature 100·9°. Restless night; lies perfectly still, not daring to move a limb on account of the severe pain experienced whenever she attempts to do so. Salicin increased to one scruple every three hours.—7 P.M.: Pulse 120; respiration 38; temperature 102°. Pain first complained of over pericardium, and there is audible over base a bruit with the first sound of the heart. A pill containing one grain and a quarter of opium to be taken with the salicin every three hours.

2nd.—9 A.M.: Pulse 108; respiration 28; temperature 100·6°. Says she feels better after taking the powders; but the joint affections continue much the same, as does also the bruit with the systole.—8 P.M.: Pulse 116; respiration 42; temperature 102·4°. Not so well in any respect; drenched in sour perspiration, which stands in great beads over her forehead and face. Salicin increased to half a drachm every three hours; opium as before.

3rd.—7.30 A.M.: Pulse 108; respiration 31; temperature 99·9°. Much better; had some sleep through the night; joints less painful; says she feels much better.—8 P.M.: Pulse 110; respiration 29; temperature 101·5°. There have been two slight attacks of epistaxis during the day; pain in side relieved.

4th.—10 A.M.: Pulse 98; respiration 21; temperature 98·7°. Quite free from pain; tongue clean and moist. Opium discontinued; salicin as before.

5th.—9.30 A.M.: Pulse 90; respiration 25; temperature 98·6°. Salicin reduced to one scruple every three hours.

6th.—9.30 A.M.: Pulse 84; respiration 18; temperature 98·2°. Convalescent. Salicin, fifteen grains, every four hours.

7th.—3 P.M.: Mutton-chop to dinner; got up for an hour in the evening.

Remarks.—This was a well-marked case of acute rheumatism, at first treated after the orthodox manner with the bicarbonate of potash, which was tried for four days without improvement, when salicin in fifteen-grain doses every three hours was commenced. The following day the remedy was increased to one scruple. The next evening (2nd inst.) four drachms had been taken, and the patient was not in a condition to encourage a continuance of the remedy; for the temperature was 103·4°, higher than it had ever been; the respiration was 42, hurried and oppressed, about every fifteenth one being prolonged into a sigh; there was pain over the pericardium and a systolic bruit. But it was resolved to give the salicin a further trial in increased doses—half a drachm every three hours. The effect was most marked. On the following morning (after four doses) the condition of the patient was changed from one of grave anxiety to one of comparative safety. There was an increase of temperature again in the evening, but not to the same extent as the previous night. This was the third day of the salicin. On the next (the fourth of the remedy) the temperature was normal, and never again rose above it; whilst the respiration gradually subsided to its normal condition in two days more, and no bruit could be detected with the heart's sounds. It is well to bear in mind that twenty-five grains of opium were used for the relief of pain in the treatment; but it is perfectly rational to attribute the cutting short of the disease to the remedy, for the introduction of which we are indebted to Dr. Maclagan, as this was a case such as one might predict to last three or four weeks under the old method of treatment, and then to leave behind it impaired heart action. The remedy should be given in increased doses when small ones do not afford relief. There was not the slightest discomfort for half-drachm doses every three hours; in fact, the patient expressed herself as feeling easier after each dose. Possibly even larger ones given earlier in the treatment might still further shorten the duration of the disease, which has hitherto been an opprobrium of the profession.

I remain, Sir, faithfully yours,

May, 1876. BENJAMIN WALKER, M.R.C.S

To the Editor of THE LANCET.

SIR,—The following case may be of interest to some, as illustrating the effects of salicin in the treatment of acute rheumatism.

E. P——, female, aged sixteen years, after exposure to wet and cold, had shivering and feverish symptoms. Seen on the 17th April. She complained of great pain in her ankles, wrists, and shoulders, the slightest movement causing great agony. Much constitutional disturbance; tongue white and thickly furred; skin hot and dry; wrists and ankles swollen; bowels constipated; catamenia expected daily; urine high-coloured, scanty, and loaded with urates. Pulse 130; temperature 104°. Ordered ten grains of salicin every four hours; hot fomentations to joints; milk and soda-water.

April 18th.—11 A.M.: No improvement; at times during the night delirious; pain and oppression over cardiac region complained of; temperature 104·5°; pulse 130; catamenia appeared. Continue salicin.

19th.—10.30 A.M.: No amelioration of symptoms; pain and oppression over cardiac region still complained of; occasional delirium during the night. Ordered castor oil; sinapism over cardiac region. Continue salicin. Temperature 105°; pulse 130.

20th.—10.30 A.M.: No better; restless; little sleep during the night. Temperature 105°; pulse 130. Continue salicin and hot fomentations.

21st.—11 A.M.: Symptoms and condition the same as yesterday; expression of face more anxious; breathing oppressed; slight friction-sound over cardiac region; delirious. Temperature 105°; pulse 130. Ordered thirty grains of salicin every four hours, and repeat sinapisms and fomentations constantly applied.

22nd.—10.30 A.M.: Had a better night; pains less violent. Temperature 104·5°; pulse 130. Expression of face not so anxious. Injected subcutaneously a solution of three grains of salicin in right shoulder. Continue thirty-grain doses of salicin every four hours.—5.45 P.M.: Pains less. Temperature 103·5°; pulse 124. No delirium; breathing easier. Repeated the injection of three grains, and continue thirty-grain doses of salicin.

23rd.—11 A.M.: Had a good night; pains less; skin not so hot; expression more cheerful. Temperature 103°; pulse 120. Repeated the injection of three grains; continue thirty grains of salicin.—6 P.M.: "I am better, doctor." Temperature 102°; pulse 110. Injected into left hip a solution of three grains of salicin; continue thirty grains of salicin.

24th.—10.30 A.M.: Temperature 102°; pulse 112. Pains gone; skin cool; a minute vesicular eruption over various parts of the body; had a good night. Repeated the injection of three grains; continue salicin.

25th.—11 A.M.: Temperature 101°; pulse 100. Vesicular eruption still present. Repeated injection of three grains; continue thirty-grain doses of salicin.

26th.—11 A.M.: Temperature 100°; pulse 98. Sleeps well; pains gone; tongue cleaner; takes more nourishment. Repeated the injection, and to continue salicin.

27th.—10 A.M.: Temperature 99°; pulse 90. Sleeps well; no pain; "feels well, but weak." Repeated injection; continue salicin. Vesicular eruption gone.

28th.—11.30 A.M.: Improvement continues; says she "feels better after the needle has been put in." Repeated the injection; ten grains of salicin every four hours.

29th.—11.30 A.M.: Temperature 98·5°; pulse 80. Ten-grain doses of salicin every four hours.

30th.—Well.

Yours &c.,

Hull, May, 1876. ANGUS MACMILLAN, M.D.

THE KEIGHLEY GUARDIANS AND VACCINATION.

IT might have been hoped that we had heard the last of the senseless and persistent opposition to vaccination on the part of the Keighley guardians, which culminated in the writ of *mandamus* which was issued by the High Court of Justice. The Board of Guardians obeyed the writ at the time by directing the vaccination officers to institute and conduct proceedings against defaulters. At a meeting, however on the 3rd inst., a motion was carried, with only two dissentients, rescinding all "resolutions which have or can be construed into a general order to prosecute persons in default." It was further resolved that the vaccination officers of Keighley and Bingley districts be informed that "this Board reserves to itself all dispensation of the Vaccination Acts." It was decided to send a copy of this resolution to the Local Government Board. The Board of Guardians assert that they have the right to give special directions to the vaccination officer in each individual case of default, the real object apparently being to evade the spirit both of the Vaccination Acts and of the recent *mandamus*. The guardians in passing this resolution would appear to have laid themselves open to a charge of contempt of Court.

THE FORENSIC INSTITUTE OF BERLIN.

THE Berlin University enjoys the advantage of a forensic institute, which is connected with the morgue—i. e., an establishment for the exhibition of all corpses found by the police or sent for medical inspection, and, as the case may be, for a forensic post-mortem. If the latter is ordered by the judicial authorities, students are not admitted, except as spectators or attendants on any demonstrations which the professor might give after the necroscopic proceedings. Those corpses, however, which are not disposed of in this manner are at present utilised to give the students facilities for performing a quasi-legal post-mortem themselves, in accordance with the new regulations drawn up for all forensic autopsies in Prussia last year. It is stated that during the five months since November last, when this practice has been followed, not less than fifty post-mortems have been made by the forensic students, mostly in cases of violent and sudden deaths. An institution like our coroner's inquest does not exist in Germany, though competent voices have been demanding something like it for a long time. So far the judge's mind is the sole arbiter for an inquiry and the order of a legal post-mortem. The establishment of some central institution for this special purpose in a great metropolis connected with a medical school seems, however, to furnish unusual advantages for efficient performance of the work as well as for the progress of forensic medicine.

G. P.—We think our correspondent ought to recover against the husband in the County Court, and that probably he would be successful; but it is impossible to be certain of the light in which the Judge may view the matter.

Dr. Wylie is thanked.

Mr. James Grant.—We do not know who published the book. The author should be communicated with.

Dr. H. J. Robbins.—The word "English" is to be taken in its literal and restricted sense. The scheme is a compact between the co-operating authorities only.

Mr. Moxhay, (Reading.)—An answer to the question was given in our issue of March 11th.

S. H. K.—Consult a surgeon.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Bentley, London; Prof. Spence, Edinburgh; Dr. Broadbent, London; Mr. Mason, London; Mr. Worsley, Heywood; Dr. Browne, Dungannon; Mr. Hughes, Birmingham; Mr. Feldmann, London; Mr. Scott, Manchester; Mr. Frowde, London; Dr. Ritchie, Hoyland Nether; Mr. Ongan, London; Dr. Duncan, Croydon; Mr. Maclachlan, London; Mr. Thompson, London; Mr. Groves, London; Mr. G. Brown, Islington; Mr. Dobson, Netley; Dr. Campbell, Edinburgh; Dr. Brushfield, Woking; Mr. Harrison, Liverpool; Mr. Long, Ipswich; Dr. West, Epsom; Mr. Stone, Liverpool; Dr. Baillie, London; Dr. Buchanan, Glasgow; Mr. Owen, Kensington; Dr. Wolfe, Glasgow; Dr. Ross, Vellore, Madras; Messrs. Wright and Co., London; Mr. Walker, Spondon; Mr. Vere Foster, London; Dr. McGrath, London; Mr. Sydney Jones, London; Dr. Wylie, Skipton; Mr. Lawson Tait, Birmingham; Dr. Castle, New York; Mr. Grant, Bradford; Dr. Holden, Sudbury; Mr. Duncan, Cork; Mr. Walker, Belfast; Mr. J. F. Palmer, London; Mr. Hopgood, London; Mr. Boyd, Truro; Mr. Dundas, Nottingham; Mr. Cowell, London; Dr. Bucknill, Rugby; Mr. Gorham, Tunbridge Wells; Mr. Morton, Surbiton; Mr. Ward, Birkenhead; Mr. Edwards, Huntingdon; Dr. Wharton, Philadelphia; Mr. J. E. Creaton, Norwich; Mr. Raven, Creaton; Mr. Mensell, Belfast; Mr. Fellowes, Burton-on-Trent; Mr. Grant, Ipswich; Mr. Ford, Witney; Mr. Walton, Stafford; Mr. Henson, Derby; Mr. Jones, Manchester; Mr. Tampson, Norwich; Mr. J. Ward, Preston; Mr. Baker, London; Mr. Lewis, Shrewsbury; Mr. Leary, Dublin; Mr. Oldham, Dover; Mr. Levinck, Tunbridge Wells; Mr. Hearon, Bedford; Mr. Meadows, Hastings; Dr. Bradley, Manchester; Mr. Roberts, London; Mr. Grove, London; Mr. Buchell; Dr. Longrigg, Penge; Mr. Hall, Liverpool; Dr. Cogan, Northampton; Mr. Field, Bradford; Mr. Harris, Liverpool; Dr. Wilson, Dorking; The Right Hon. the Lord Mayor of London; Observer; Ignatius; Surgeon-Major; Several Boys; The Registrar-General of Edinburgh, &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Shearman, Swinton; Mr. Skrimshire, Bryn Mawr; Mrs. Holwell, Leeds; Mr. Grant, Birmingham; Mr. Atkinson, Ashford; Mr. Whitfield, Birmingham; Dr. Morton, Sheffield; Mr. Cooper, Macclesfield; Mr. Robertson, Melbourne; Dr. Dickson, Buxton; Mr. Freeman, London; Mr. Pukard, Stratton; Mr. Griffiths, Cheltenham; Dr. Newman, Bowness; Dr. Davey, Wellington; Mr. Sergeant, Camden-town; Dr. Miller, King's-cross; Dr. Thornley, Leicester; Mr. Ogden, Manchester; Mr. James, Cwm-avon; Mr. Eberle, Basingwold; Mr. Times, Harwich; Dr. Waterhouse, Bolton; Mr. Jones, Darlaston; Mr. Savage, Swinefleet; Mr. White, London; Mr. Evans, Seaford; Mr. Cotton, Chichester; Medicus, Liverpool; D. P., Totnes; V., Hemel Hempstead; M.R.C.S., St. Edmunds; B. F.; Medicus, Borough; Alumnus; J. G.; M. B., Oswestry; Delta, Axminster; E. H., Sheffield; W. F. S., London; A. Z., Lynn; Alpha, Wednesbury; J. C. J., Warrington; Physician; H., Sheffield; A. B. C., Leeds; Omega, Oxford; Medicus, Eardesley; Excelsior; M. H., London; W. F. P., Leicester; W. H. P.

Manchester Guardian, Newcastle Chronicle, Metropolitan, Surrey Advertiser, Western Morning News, Macclesfield Courier, Cork Constitution, Rugby Advertiser, Birmingham Morning News, East London Observer, Record, and *Liverpool Mercury* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, MAY 11TH, 1876.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb.	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp	Rain-fall.	Remarks at 9 A.M.
May 5	30·41	S.E.	44	49	90	62	39	...	Cloudy
„ 6	30·28	E.	45	52	97	67	41	...	Overcast
„ 7	30·31	S.E.	47	52	91	58	44	...	Cloudy
„ 8	30·43	E.	45	50	90	59	41	...	Cloudy
„ 9	30·30	E.	43	50	92	58	43	...	Cloudy
„ 10	30·20	E.	44	49	93	57	41	...	Cloudy
„ 11	30·19	E.	46	52	90	61	42	...	Fine

Medical Diary for the ensuing Week.

Monday, May 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 3 P.M.

Tuesday, May 16.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Acute Acritis causing Angina Pectoris; Disease of Aorta; Pneumonia in Birds; Calcareous Matter from Urethra of Ox; Abnormalities in Egg-formation; Sarcoma of Sclerotic; Tumour of Scalp; Organs after Lithotrity; Lymphadenoma; Acute Tuberculosis; Tænia Medio-canellata; Sclerosis of Spinal Cord; Cerebral Aneurism; Tumour of Fibula; Congenital Heart Disease; Congenital Malformation of Heart; Specimens of Diphtheria; Case of Thyrotomy; Pyo-pericardium; &c. &c.

Wednesday, May 17.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Expected Operation, 2 P.M.: Subcutaneous Osteotomy of Femur.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 3½ P.M.

Thursday, May 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Mr. Bickman Godlee, "On the Antiseptic Treatment of Wounds."

Friday, May 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. J. Needham, "On a Case of Cirrhosis of Liver in a Child."

Saturday, May 20.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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